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ABSTRACT

A continuing project titled "Measuring Career Readiness in Elementary Education" had as its fourth-year goal constructing learning activities to coordinate with six subtest areas of the Career Education Readiness Test (CERT). The secondary goal was to continue the refinement of the CERT through the analysis of data gathered during the current year and in previous years. Using data gathered from the Joliet (Illinois) Pilot Study, the following statistical procedures were conducted: a correlational analysis, an item analysis, and a reliability analysis. The results were encouraging and indicate that CERT has the potential to become a valuable tool for elementary teachers who are involved, or interested, in career education. (Specific results of the statistical procedures are included in this final report, along with descriptions of studies conducted in Breese, Illinois, and East Saint Louis, Illinois, and a workshop conducted in Belleville, Illinois. Also included is a section summarizing initial contacts with commercial publishers. The report concludes with a discussion of limitations and recommendations.) (BM)

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Career Education Readiness Test Final Report

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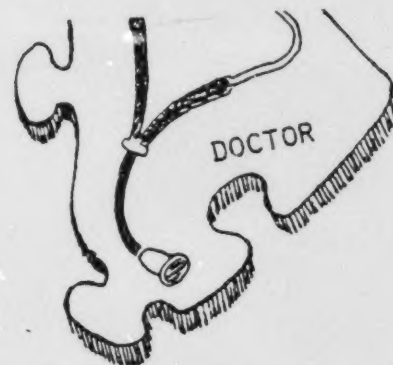
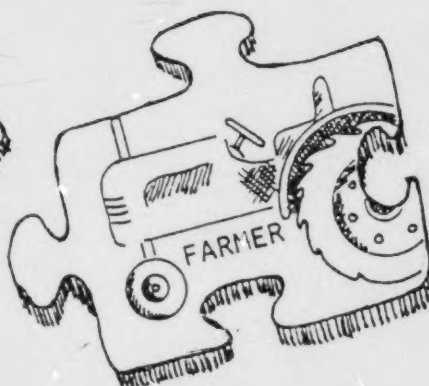
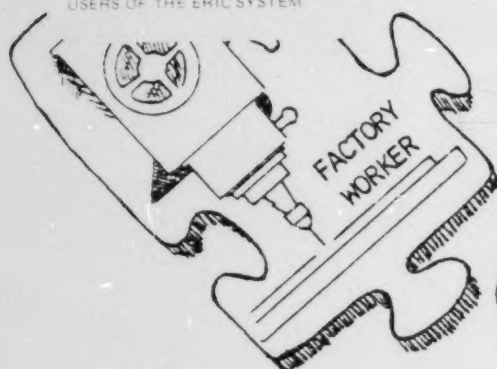
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CAREER EDUCATION READINESS MEASUREMENT AND RESEARCH

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INTRODUCTION

During 1977-1978 the Division of Adult, Vocational and Technical Education of the Illinois Office of Education funded the fourth year of a continuing project titled, "Measuring Career Readiness in Elementary Education." The primary goal of this year's project was to construct learning activities to coordinate with the six subtest areas of the Career Education Readiness Test (CERT). The secondary goal was to continue the refinement of the CERT through the analysis of data gathered during the current year and data gathered in previous years.

Included in the following final report are descriptions of studies conducted in Breese, Illinois, East Saint Louis, Illinois, and a workshop conducted in Belleville, Illinois. The results of statistical procedures conducted during the year are presented in the sections concerned with item analysis, correlational analysis and reliability analysis. Also included is a section summarizing initial contacts with commercial publishers. The report concludes with a discussion of limitations and recommendations.

An addendum to this report will be filed at a later date. This addendum will contain the results of the East Saint Louis study and a compilation of the career education learning activities constructed by classroom teachers during the current year.

BELLEVILLE, ILLINOIS WORKSHOP

On October 21st and November 28th a project staff member conducted a workshop for the school personnel at Whiteside Elementary School in Belleville, Illinois. The fourteen teachers who participated in this workshop constructed CERT learning activities. No testing was administered in conjunction with this workshop. The learning activities that were constructed will be contained in an addendum to this report.

BREESE, ILLINOIS STUDY

During the winter and spring quarters a project staff member, through the cooperation of the Department of Early Childhood and Elementary Education of Southern Illinois University at Edwardsville, taught a graduate level course titled, "Career Education for Classroom Teachers." Participation in the project's study was a requisite of the course. The six students enrolled in the class during the winter quarter were teachers from Breese Elementary School.

A total of one hundred ninety-five (195) students were tested with the CERT. One hundred four (104) students were tested with the Primary Form and ninety-one (91) were tested with the Intermediate Form. Table 1 identifies the number of students tested in each grade level.

TABLE 1

BREESE, ILLINOIS STUDENTS

<u>Grade Level</u>	<u>Students Receiving CERT Activities</u>	<u>Students Not Receiving CERT Activities</u>
1	13	16
2	17	22
3	23	13
4	28	18
6	23	0
8	19	3
<u>Total</u>	123	72

As indicated in Table 1, students in grades 1 through 4 were divided into two groups: those who received CERT learning activities and those

who did not. One classroom per grade level was assigned to each group. There was an insufficient number of participating teachers in grades 6 and 8 to permit this division. Twenty to thirty minutes of class time per week was allocated to career education instruction in those classrooms designated to receive CERT activities. All of the learning activities were designed by the classroom teachers.

During the week of January 9th, prior to the introduction of the CERT learning activities, all students involved in the study were tested with the CERT. A second testing of all the students involved in the study was conducted after instruction in all of the learning activities had been completed. This testing was administered during the week of February 27th.

It was hypothesized by the project staff that involvement in the CERT learning activities would significantly raise students' scores on the CERT and thereby provide a guide for learning activities which could be used as a model for program development. Unfortunately, the results of the study failed to support this hypothesis.

The mean scores resulting from the two administrations of the CERT are presented in Tables 2 through 4. "t" tests were then conducted to determine which, if any, of the differences between the means were statistically significant. Table 5 contains the results of this procedure. Given the almost total lack of significant differences, it must be concluded that student involvement in CERT learning activities failed to significantly increase their scores on the CERT.

TABLE 2

MEAN SCORES - BREESE STUDY

ALL STUDENTS

Test Area	Grade Level											
	<u>1</u>		<u>2</u>		<u>3</u>		<u>4</u>		<u>6</u>		<u>8</u>	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
<u>Part I</u>												
Sex Role Stereo.	5.31	4.10	4.67	3.72	3.72	3.08	3.54	4.20	3.52	3.65	3.60	3.40
Accuracy	9.41	10.03	12.67	13.23	12.41	13.17	12.70	11.83	13.08	13.35	13.40	12.95
<u>Part II</u>												
Money Only	10.38	8.97	8.17	9.49	8.72	7.36	4.00	3.78	4.78	6.96	11.90	10.75
Uses for Money	6.41	6.83	8.74	8.92	8.50	9.47	2.52	3.39	-.04	1.74	.85	1.45
Serv. to Others	6.31	6.00	6.28	5.41	6.83	6.25	-4.89	-4.98	-3.04	-3.78	-7.35	-9.50
Pers. Satis.	6.45	6.14	6.38	5.26	5.61	6.81	-1.67	-2.11	-1.61	-4.96	-5.35	-2.75
<u>Part III</u>												
Agri./Indust.	4.45	4.34	5.44	5.33	5.72	6.19	-3.98	-2.24	.70	.17	-4.90	-2.75
Bus./Mkt./Mgt.	5.10	5.00	4.92	5.51	5.25	5.14	-3.52	-2.39	-4.22	-5.00	-.55	-1.35
Health	7.07	6.28	6.82	6.28	6.56	6.36	6.07	5.15	.96	1.17	5.30	5.90
Pers./Pub. Serv.	6.83	6.83	6.10	6.13	6.33	6.06	1.09	-.83	2.35	3.61	.15	-1.90
<u>Part IV</u>												
Career Categ.	8.55	8.38	10.48	11.18	9.22	14.39	8.28	8.85	9.35	10.39	9.85	9.35
<u>Part V</u>												
Occup. Respon.	9.24	10.69	13.49	12.62	14.27	13.64	11.13	12.35	14.09	13.09	14.50	12.85
<u>Part VI</u>												
W. of W. Vocab.	5.75	5.83	9.92	10.10	11.55	13.94	15.59	17.37	20.96	18.87	23.05	19.20
<u>N of Students</u>	29	29	39	39	36	36	46	46	23	23	20	20

TABLE 3

MEAN SCORES - BREESE STUDY

STUDENTS WITH INTERVENING CAREER EDUCATION

Test Area	Grade Level											
	<u>1</u>		<u>2</u>		<u>3</u>		<u>4</u>		<u>6</u>		<u>8</u>	
	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2	Test 1	Test 2
<u>Part I</u>												
Sex Role Stereo.	5.31	4.62	5.00	3.53	2.87	2.43	2.96	3.07	3.52	3.65	3.68	3.58
Accuracy	9.92	10.23	13.23	13.71	12.73	13.22	13.61	13.36	13.08	13.35	13.42	12.84
<u>Part II</u>												
Money Only	10.38	8.31	7.47	9.24	7.83	6.17	3.18	3.50	4.78	6.96	11.74	10.42
Uses for Money	7.30	7.92	8.29	8.76	8.73	9.96	2.96	5.07	-.04	1.74	.84	1.26
Serv. to Others	5.62	5.31	6.18	5.35	7.17	6.78	-4.04	-5.68	-3.04	-3.78	-7.47	-9.47
Pers. Satis.	6.31	6.77	7.29	5.65	5.87	7.00	-2.11	-2.86	-1.61	-4.96	-5.05	-2.26
<u>Part III</u>												
Agri./Indust.	3.62	3.85	4.71	4.53	5.34	5.96	-4.93	-3.93	.69	.17	-4.37	-2.16
Bus./Mkt./Mgt.	4.77	5.46	4.53	5.24	5.61	4.96	-1.46	-.04	-4.22	-5.00	-.74	-1.68
Health	8.54	7.31	7.76	7.06	6.52	6.74	6.04	4.54	.96	1.17	5.21	5.84
Pers./Pub. Serv.	6.08	6.46	5.94	6.00	6.34	6.00	.18	-.71	2.34	3.61	-.16	-2.16
<u>Part IV</u>												
Career Categ.	8.54	9.38	11.12	11.41	10.00	15.39	8.86	9.71	9.35	10.39	9.00	9.26
<u>Part V</u>												
Occup. Respon.	9.54	11.38	14.41	13.71	15.17	14.78	12.54	14.75	14.09	13.09	14.42	12.79
<u>Part VI</u>												
W. of W. Vocab.	6.15	5.15	11.82	11.41	12.87	16.22	17.89	20.96	20.96	18.87	23.00	18.74
<u>N of Students</u>	13	13	17	17	23	23	28	28	23	23	20	20

TABLE 4

MEAN SCORES - BREESE STUDY

STUDENTS WITHOUT INTERVENING CAREER EDUCATION

<u>Test Area</u>	<u>Grade Level</u>							
	<u>1</u>		<u>2</u>		<u>3</u>		<u>4</u>	
	<u>Test 1</u>	<u>Test 2</u>	<u>Test 1</u>	<u>Test 2</u>	<u>Test 1</u>	<u>Test 2</u>	<u>Test 1</u>	<u>Test 2</u>
<u>Part I</u>								
Sex Role Stereo.	5.31	3.69	4.41	3.86	5.23	4.23	4.44	5.94
Accuracy	9.00	9.88	12.23	12.86	11.84	13.08	11.23	9.44
<u>Part II</u>								
Money Only	10.37	9.50	8.73	9.68	10.31	9.46	5.28	4.22
Uses for Money	5.68	5.94	9.09	9.05	8.08	8.62	1.83	.78
Serv. to Others	6.88	6.56	6.36	5.45	6.23	5.31	-6.22	-3.89
Pers. Satis.	6.56	5.63	5.68	4.95	5.15	6.46	-1.00	-.94
<u>Part III</u>								
Agri./Indust.	5.13	4.75	6.00	5.95	6.38	6.62	-2.50	.39
Bus./Mkt./Mgt.	5.37	4.56	5.23	5.73	4.62	5.46	-6.72	-6.06
Health	5.88	5.44	6.09	5.68	6.62	5.69	6.11	6.11
Pers./Pub. Serv.	7.31	7.13	6.23	6.23	6.31	6.15	2.50	-1.00
<u>Part IV</u>								
Career Categ.	8.56	7.56	10.00	11.00	7.85	12.62	7.39	7.50
<u>Part V</u>								
Occup. Respon.	9.00	10.13	12.77	11.77	12.69	11.62	8.94	8.61
<u>Part VI</u>								
W. of W. Vocab.	5.43	6.38	8.45	9.09	9.23	9.92	12.00	11.78
<u>N of Students</u>	16	16	22	22	13	13	18	18

NOTE: The number of 6th and 8th grade students in this category was too small to permit meaningful results to be reported.

TABLE 5

"t" VALUES AND LEVELS OF SIGNIFICANCE

BREESE STUDY

Test Area	Grade Level									
	1-3		1		2		3		4	
	"t"	Sig.	"t"	Sig.	"t"	Sig.	"t"	Sig.	"t"	Sig.
<u>Part I</u>										
Sex Role Stereotyping	.30	.765	.87	.390	.85	.404	.65	.526	1.35	.188
Accuracy	.89	.375	.48	.634	.22	.823	1.16	.261	1.08	.293
<u>Part II</u>										
Money Only	.78	.437	.89	.381	.60	.553	.72	.476	.59	.557
Uses for Money	1.02	.311	.35	.731	.46	.652	.58	.563	1.60	.121
Service to Others	.31	.756	.01	.997	.07	.944	.43	.673	2.41	.021
Personal Satisfaction	.57	.572	1.18	.248	1.02	.317	.19	.877	.42	.674
<u>Part III</u>										
Agricultural/Industrial	.78	.434	.70	.492	.20	.840	.46	.648	1.01	.317
Business/Marketing/Management	.13	.900	1.67	.110	.23	.821	1.99	.056	.43	.673
Health	.24	.809	.78	.440	.46	.651	1.28	.210	.63	.534
Personal and Public Service	.14	.890	.69	.496	.09	.927	.25	.802	1.48	.145
<u>Part IV</u>										
Career Categories	1.62	.109	1.34	.192	.60	.554	.56	.577	1.01	.322
<u>Part V</u>										
Occupational Responsibilities	.54	.591	.39	.699	.27	.788	.58	.568	2.91	.006
<u>Part VI</u>										
World of Work Vocabulary	.45	.655	1.23	.229	1.05	.299	2.44	.020	2.15	.038
<u>N of Students</u>	104		29		39		36		46	

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EAST SAINT LOUIS, ILLINOIS STUDY

During the spring quarter, seven teachers from various elementary schools in East Saint Louis, Illinois were enrolled in "Career Education for Classroom Teachers." Once again, involvement in the project's study was a course requirement.

A total of one hundred seventy-two (172) students in grades 1 through 3 were tested twice with the CERT. Table 6 identifies the number of students tested in each grade level.

TABLE 6

EAST SAINT LOUIS STUDENTS

<u>Grade Level</u>	<u>Number of Students</u>
1	21
2	72
3	79
<u>Total</u>	172

Between testings, all students received twenty to thirty minutes of career education instruction per week. This instruction was in the form of CERT learning activities constructed by their classroom teachers.

Since the second testing was not administered to this group until the first week of June, analysis of the results of this study has not been completed. The results of this study will be contained in an addendum to this report.

CORRELATIONAL ANALYSIS

While the testing was being conducted for the Joliet Pilot Study, the project staff also collected demographic information for each student tested. To examine the relationship between these demographic variables and scores on the CERT, mean scores for each level of each demographic variable were determined and an analysis of variance procedure was conducted to determine the level of significance of the differences between the means. The results of this process are presented in Tables 7 through 30. The levels of significance are underlined in those instances in which the differences between the mean scores are significant at the .05 level or higher.

A detailed discussion of these results is beyond the scope of this report. In the remainder of this section, however, a brief summary of the significant findings in each subtest will be presented.

PART I - SEX ROLE STEREOTYPING

Sex

- males tend to be less stereotypical in grades K-3 and 6

Socioeconomic Level

- significant differences in grades K-3, 1-3, 1 and 6 - tendency is for low SES students to be more stereotypical than high SES

Lunch Program

- students enrolled in a lunch program are more stereotypical in grades K-3, 1-3, 2 and 6

Race

- significant differences for all grades and all groups except K, 4, and 5 - tendency is for caucasians to be least stereotypical

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Reading and Math Achievement

- significant differences for all groups and for grades 1, 5, and 6 -
tendency is for stereotypical attitudes to decrease as
achievement level increases

Amount of Career Education

- many significant differences but no consistent pattern

PART II - REWARDS FOR WORK

Sex

- males scored highest in Money Only - females scored highest in
Service to others

Reading Achievement

- average and below average students scored highest in Money Only and
Uses for Money - above average students scored highest in
Service to Others

PART III - OCCUPATIONAL ESTEEM

Sex

- males scored higher in Agricultural/Industrial and Personal and
Public Service - females scored higher in Health and in
Business/Marketing/Management

Socioeconomic Level

- low SES students scored higher in Business/Marketing/Management -
middle SES students scored higher in Health - middle and upper
SES students scored higher in Personal and Public Service

Race

- black students scored higher in Business/Marketing/Management -
caucasian students scored higher in Health

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Reading Achievement

- above average students scored highest and below average students scored lowest in Health - below average students scored highest and above average students scores lowest in Business/Marketing/Management

Amount of Career Education

- students with no career education scored highest in Personal and Public Service

PART IV - CAREER CATEGORIES

Sex

- at the primary level, males scored higher than females

Socioeconomic Level

- low SES students scored lower than middle and high SES students

Race

- caucasian students scored higher than other racial groups

Reading and Math Achievement

- above average students scored higher than average or below average students

Amount of Career Education

- scores tend to increase as amount of career education increases

PART V - OCCUPATIONAL RESPONSIBILITIES

Lunch Program

- at the primary level, students not on a lunch program scored higher

Socioeconomic Level

- at the primary level, scores increased with increasing SES level

Race

- significant differences for all groups and all grades except K and 4 - tendency is for caucasians to score highest

Parents at Home

- significant differences for all groups and grades except K, 2 and 4 - students with both parents at home tend to score highest

Reading and Math Achievement

- scores increase as achievement level increases

Amount of Career Education

- many significant differences but no consistent pattern

PART VI - WORLD OF WORK VOCABULARY

Socioeconomic Level

- high SES students scored higher than middle and low SES students

Reading and Math Achievement

- above average students scored higher than average and below average students

Amount of Career Education

- students receiving career education scored higher than students not receiving career education

As stated at the beginning of this section, the preceding is intended to be only a brief summary of some of the significant findings of the correlational analysis. The reader is encouraged to carefully study the accompanying tables to gain a more complete picture of this analysis.

TABLE 7

SEX ROLE STEREOTYPING

MEAN SCORES AND LEVELS OF SIGNIFICANCE

PRIMARY FORM						
	K	1	2	3	K-3	1-3
<u>SEX</u>						
Male	5.92	5.28	4.32	3.80	4.42	4.37
Female	6.74	5.64	4.65	4.13	4.84	4.76
Significance	.355	.389	.333	.288	.042	.062
<u>LUNCH PROGRAM</u>						
Yes	6.15	6.05	5.42	4.19	5.16	5.23
No	6.39	5.24	4.36	3.74	4.48	4.38
Significance	.785	.078	.021	.221	.004	.001
<u>SOCIOECONOMIC LEVEL</u>						
High	--	3.38	4.08	4.05	3.93	3.93
Middle	6.52	5.26	4.29	3.77	4.45	4.36
Low	6.05	5.98	5.27	4.26	5.19	5.27
Significance	.588	.031	.065	.452	.002	.001
<u>RACE</u>						
Caucasian	6.62	5.10	4.23	2.39	4.38	4.34
Black	6.15	6.36	5.74	2.18	5.55	5.49
Oriental	--	7.00	3.75	2.41	6.00	6.00
Mexican-American	--	3.33	5.00	1.00	3.50	3.50
American Indian	--	--	--	--	--	--
Other	--	7.38	5.75	--	6.83	6.83
Significance	.603	.015	.027	.049	.001	.001
<u>PARENTS AT HOME</u>						
Both	6.00	5.32	4.51	2.44	4.57	4.53
Father Only	--	5.50	--	1.50	2.33	3.50
Mother Only	10.50	5.77	4.50	4.19	4.91	4.90
None	--	10.00	4.50	6.00	7.00	7.00
Significance	.038	.131	.999	.368	.032	.117
<u>READING ACHIEVEMENT</u>						
Above Average	5.63	4.73	4.10	3.89	4.20	4.16
Average	6.46	5.13	4.39	3.86	4.62	4.46
Below Average	6.36	6.44	5.09	3.98	5.12	5.18
Significance	.777	.004	.141	.203	.008	.002
<u>MATH ACHIEVEMENT</u>						
Above Average	6.66	4.48	4.15	4.83	4.25	4.14
Average	6.12	5.21	4.73	3.89	4.73	4.63
Below Average	6.33	6.61	4.60	4.10	4.96	5.07
Significance	.888	.001	.302	.791	.038	.006
<u>AMOUNT OF CAREER EDUCATION</u>						
0	--	--	--	--	--	--
$\frac{1}{2}$ -1	--	4.72	4.70	4.06	4.38	4.46
1 $\frac{1}{2}$ -2	--	5.40	4.18	9.50	4.89	4.89
2 $\frac{1}{2}$ -3	--	5.76	5.33	7.00	5.76	5.76
3 $\frac{1}{2}$ -4	--	--	--	--	--	--
Over 4	--	--	--	3.98	3.98	3.98
Significance	--	.284	.472	.012	.002	.003

TABLE 8

SEX ROLE STEREOTYPING

MEAN SCORES AND LEVELS OF SIGNIFICANCE

INTERMEDIATE FORM

	<u>4</u>	<u>5</u>	<u>6</u>	<u>4-6</u>
<u>SEX</u>				
Male	4.09	4.34	3.86	4.04
Female	4.00	4.37	4.84	4.42
Significance	.817	.929	.007	.072
<u>LUNCH PROGRAM</u>				
Yes	5.25	4.69	5.76	
No	4.01	4.01	4.02	
Significance	.056	.134	.001	
<u>SOCIOECONOMIC LEVEL</u>				
High	4.11	2.53	3.00	2.48
Middle	3.99	4.29	4.05	4.13
Low	4.95	4.39	5.69	5.09
Significance	.136	.113	.003	.184
<u>RACE</u>				
Caucasian	4.15	4.20	4.13	4.16
Black	3.25	4.00	6.77	5.92
Oriental	--	9.00	--	9.00
Mexican-American	4.00	3.00	--	3.33
American Indian	5.00	--	1.00	5.89
Other	1.00	5.00	--	2.11
Significance	.260	.54	.001	.001
<u>PARENTS AT HOME</u>				
Both	4.05	4.13	4.19	4.15
Father Only	--	6.80	4.56	5.36
Mother Only	4.85	4.16	5.41	4.84
None	3.21	4.63	5.00	6.00
Significance	.164	.147	.248	.058
<u>READING ACHIEVEMENT</u>				
Above Average	3.83	3.31	3.26	3.40
Average	4.19	4.47	4.24	4.29
Below Average	4.33	5.18	5.61	5.19
Significance	.365	.001	.001	.001
<u>MATH ACHIEVEMENT</u>				
Above Average	3.75	3.33	3.16	3.46
Average	4.10	4.50	4.00	4.15
Below Average	4.39	5.02	6.01	5.36
Significance	.697	.001	.001	.001
<u>AMOUNT OF CAREER EDUCATION</u>				
0	4.11	3.92	4.77	4.39
$\frac{1}{2}$ -1	4.60	4.33	4.52	4.46
1 $\frac{1}{2}$ -2	3.74	3.58	2.83	3.57
2 $\frac{1}{2}$ -3	8.00	3.92	5.14	4.42
3 $\frac{1}{2}$ -4	--	--	--	--
Over 4	--	6.50	--	6.50
Significance	.094	.001	.001	.001

TABLE 9
REWARDS FOR WORK

MONEY ONLY

MEAN SCORES AND LEVELS OF SIGNIFICANCE

PRIMARY FORM						
	K	1	2	3	K-3	1-3
<u>SEX</u>						
Male	9.08	8.98	8.06	7.80	8.28	8.20
Female	10.11	8.66	6.96	6.73	7.51	7.37
Significance	.258	.526	.018	.017	.004	.002
<u>LUNCH PROGRAM</u>						
Yes	9.65	9.21	7.67	7.90	8.50	8.32
No	9.43	8.66	7.15	7.18	7.66	7.57
Significance	.812	.318	.378	.194	.005	.021
<u>SOCIOECONOMIC LEVEL</u>						
High	--	5.13	5.50	6.73	6.07	6.07
Middle	9.38	8.89	7.48	7.14	7.79	7.72
Low	9.68	9.02	8.39	8.51	8.81	8.67
Significance	.740	.010	.036	.046	.001	.001
<u>RACE</u>						
Caucasian	9.57	8.45	7.32	7.28	7.71	7.61
Black	9.65	10.22	8.54	7.84	8.98	8.90
Oriental	--	9.60	7.25	9.00	8.64	8.64
Mexican-American	--	10.00	4.50	5.00	7.33	7.33
American Indian	--	--	--	--	--	--
Other	--	8.00	9.00	--	8.33	8.33
Significance	.934	.083	.236	.681	.009	.018
<u>PARENTS AT HOME</u>						
Both	9.24	8.63	7.50	7.18	7.77	7.71
Father Only	--	9.50	--	10.50	9.83	10.00
Mother Only	11.50	9.46	7.87	8.19	8.67	8.55
None	--	8.00	8.50	14.00	9.40	9.40
Significance	.275	.603	.800	.086	.047	.079
<u>READING ACHIEVEMENT</u>						
Above Average	9.88	7.20	6.57	6.25	6.74	6.60
Average	9.58	8.92	8.18	7.67	8.37	8.26
Below Average	9.18	9.82	7.62	8.38	8.59	8.54
Significance	.876	.001	.017	.005	.001	.001
<u>MATH ACHIEVEMENT</u>						
Above Average	9.89	7.17	6.49	6.25	6.72	6.58
Average	9.56	9.01	8.08	7.58	8.32	8.22
Below Average	9.11	9.70	7.88	7.93	8.58	8.51
Significance	.856	.002	.004	.029	.001	.001
<u>AMOUNT OF CAREER EDUCATION</u>						
0	--	--	--	--	--	--
$\frac{1}{2}$ -1	--	7.85	7.78	7.47	7.67	7.67
1 $\frac{1}{2}$ -2	--	8.71	7.06	11.00	7.95	7.95
2 $\frac{1}{2}$ -3	--	9.93	7.00	9.00	9.76	9.76
3 $\frac{1}{2}$ -4	--	--	--	--	--	--
Over 4	--	--	--	7.37	7.37	7.37
Significance	--	.015	.459	.537	.001	.001

TABLE 10

REWARDS FOR WORK

MONEY ONLY

MEAN SCORES AND LEVELS OF SIGNIFICANCE

INTERMEDIATE FORM

	<u>4</u>	<u>5</u>	<u>6</u>	<u>4-6</u>
<u>SEX</u>				
Male	1.04	3.14	3.75	2.77
Female	.02	-1.54	.22	- .39
Significance	.517	.001	.002	.001
<u>LUNCH PROGRAM</u>				
Yes	.31	1.79	2.86	
No	.59	1.07	1.73	
Significance	.915	.652	.449	
<u>SOCIOECONOMIC LEVEL</u>				
High	1.78	5.65	5.00	1.80
Middle	.41	.59	1.62	.97
Low	1.62	2.00	3.38	2.59
Significance	.760	.091	.408	.349
<u>RACE</u>				
Caucasian	.45	1.03	2.02	1.30
Black	3.00	8.67	2.85	3.83
Oriental	--	-5.00	--	-5.00
Mexican-American	14.00	14.00	--	14.00
American Indian	-5.00	--	2.00	- .24
Other	-1.00	4.00	--	-1.08
Significance	.643	.131	.826	.078
<u>PARENTS AT HOME</u>				
Both	9.79	1.18	2.19	1.26
Father Only	--	3.40	-1.00	.57
Mother Only	10.16	.65	1.92	1.45
None	10.14	7.13	-1.00	-3.60
Significance	.802	.331	.905	.833
<u>READING ACHIEVEMENT</u>				
Above Average	- .72	- .48	- .02	- .35
Average	- .32	1.15	2.94	1.53
Below Average	4.13	3.34	3.27	3.20
Significance	.039	.037	.036	.018
<u>MATH ACHIEVEMENT</u>				
Above Average	.68	.65	.66	.53
Average	.56	.74	1.92	.97
Below Average	.75	2.46	3.69	2.68
Significance	.474	.483	.113	.089
<u>AMOUNT OF CAREER EDUCATION</u>				
0	.53	.11	.13	.09
$\frac{1}{2}$ -1	1.54	2.67	3.93	2.97
$1\frac{1}{2}$ -2	- .14	1.92	.94	.46
$2\frac{1}{2}$ -3	14.00	.45	2.90	1.34
$3\frac{1}{2}$ -4	--	--	--	--
Over 4	--	1.47	--	1.47
Significance	.419	.549	.042	.019

TABLE 11

REWARDS FOR WORK

USES FOR MONEY

MEAN SCORES AND LEVELS OF SIGNIFICANCE

PRIMARY FORM						
	K	1	2	3	K-3	1-3
<u>SEX</u>						
Male	6.08	7.66	7.73	8.52	7.91	8.02
Female	6.63	8.01	7.57	9.38	8.19	8.28
Significance	.546	.410	.713	.040	.256	.310
<u>LUNCH PROGRAM</u>						
Yes	9.75	7.92	7.25	8.40	7.90	7.89
No	4.91	7.94	7.41	8.98	7.96	8.10
Significance	.001	.973	.789	.242	.850	.495
<u>SOCIOECONOMIC LEVEL</u>						
High	--	6.88	10.00	6.91	7.79	7.79
Middle	4.95	7.87	7.57	9.06	8.02	8.15
Low	7.64	7.85	7.13	9.00	7.90	7.93
Significance	.002	.639	.047	.013	.859	.659
<u>RACE</u>						
Caucasian	4.67	7.90	7.71	8.89	8.03	8.15
Black	7.95	7.22	7.59	8.34	7.76	7.69
Oriental	--	9.40	5.00	8.00	7.55	7.55
Mexican-American	--	7.00	10.00	9.00	8.33	8.33
American Indian	--	--	--	--	--	--
Other	--	8.88	6.75	--	8.17	8.17
Significance	.001	.355	.521	.829	.917	.735
<u>PARENTS AT HOME</u>						
Both	4.95	7.84	7.56	8.93	7.96	8.08
Father Only	--	7.50	--	9.00	8.83	8.25
Mother Only	4.50	7.87	8.03	7.69	7.82	7.88
None	--	7.50	4.50	9.00	6.60	6.60
Significance	.824	.996	.374	.357	.720	.750
<u>READING ACHIEVEMENT</u>						
Above Average	6.50	8.40	7.66	9.09	8.26	8.31
Average	6.13	8.00	7.71	8.85	8.02	8.16
Below Average	6.64	7.18	7.51	8.32	7.58	7.65
Significance	.880	.075	.983	.562	.287	.311
<u>MATH ACHIEVEMENT</u>						
Above Average	5.89	8.26	7.94	9.69	8.37	8.48
Average	6.00	7.94	7.41	8.58	7.79	7.92
Below Average	7.67	7.32	7.67	8.54	7.90	7.91
Significance	.304	.249	.555	.093	.146	.139
<u>AMOUNT OF CAREER EDUCATION</u>						
0	--	--	--	--	--	--
$\frac{1}{2}$ -1	--	8.41	7.70	9.47	8.46	8.46
$1\frac{1}{2}$ -2	--	8.04	7.25	8.50	7.67	7.67
$2\frac{1}{2}$ -3	--	8.07	9.33	6.00	8.10	8.10
$3\frac{1}{2}$ -4	--	--	--	--	--	--
Over 4	--	--	--	8.63	8.63	8.63
Significance	--	.819	.531	.299	.166	.166

TABLE 12

REWARDS FOR WORK

USES FOR MONEY

MEAN SCORES AND LEVELS OF SIGNIFICANCE

INTERMEDIATE FORM

	4	5	6	4-6
<u>SEX</u>				
Male	1.92	1.20	.80	1.19
Female	2.11	2.15	2.86	2.30
Significance	.873	.310	.021	.039
<u>LUNCH PROGRAM</u>				
Yes	6.88	2.52	3.27	
No	1.41	1.55	1.62	
Significance	.005	.433	.150	
<u>SOCIOECONOMIC LEVEL</u>				
High	-4.56	3.53	-.50	.28
Middle	2.10	1.47	1.63	1.68
Low	3.76	2.55	3.16	3.02
Significance	.019	.615	.198	.057
<u>RACE</u>				
Caucasian	1.99	1.71	1.68	1.77
Black	5.25	.67	2.96	2.83
Oriental	--	3.00	--	3.00
Mexican-American	6.00	7.00	--	6.67
American Indian	1.00	--	-4.00	-.11
Other	--	6.00	--	6.00
Significance	.867	.854	.214	.166
<u>PARENTS AT HOME</u>				
Both	1.90	1.58	1.74	1.56
Father Only	--	-2.60	2.22	.50
Mother Only	.35	4.24	1.90	2.42
None	5.93	-.88	9.33	6.80
Significance	.084	.191	.617	.270
<u>READING ACHIEVEMENT</u>				
Above Average	1.06	1.87	1.16	1.42
Average	3.40	1.73	1.65	2.07
Below Average	1.03	1.61	2.73	2.04
Significance	.250	.996	.350	.868
<u>MATH ACHIEVEMENT</u>				
Above Average	.28	.74	1.70	.96
Average	2.69	1.86	1.30	1.71
Below Average	2.33	2.89	2.62	2.68
Significance	.306	.303	.465	.088
<u>AMOUNT OF CAREER EDUCATION</u>				
0	-1.05	1.20	2.18	1.54
$\frac{1}{2}$ -1	1.62	2.14	1.83	1.91
1 $\frac{1}{2}$ -2	2.89	1.62	1.41	1.65
2 $\frac{1}{2}$ -3	4.00	1.74	1.68	1.67
3 $\frac{1}{2}$ -4	--	--	--	--
Over 4	--	2.17	--	2.17
Significance	.189	.965	.944	.984

TABLE 13

REWARDS FOR WORK

SERVICE TO OTHERS

MEAN SCORES AND LEVELS OF SIGNIFICANCE

PRIMARY FORM						
	<u>K</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>K-3</u>	<u>1-3</u>
<u>SEX</u>						
Male	7.63	6.11	7.34	7.02	6.93	6.89
Female	6.95	7.28	8.21	7.42	7.65	7.69
Significance	.498	.010	.047	.318	.002	.001
<u>LUNCH PROGRAM</u>						
Yes	5.05	6.37	7.17	7.70	6.67	6.83
No	9.30	6.87	8.39	7.31	7.67	7.60
Significance	.001	.283	.035	.620	.001	.007
<u>SOCIOECONOMIC LEVEL</u>						
High	--	8.13	8.00	8.00	8.02	8.02
Middle	9.24	6.80	8.00	7.36	7.56	7.49
Low	5.50	6.52	6.82	6.43	6.50	6.59
Significance	.001	.353	.087	.096	.001	.003
<u>RACE</u>						
Caucasian	9.14	6.75	7.83	7.21	7.39	7.33
Black	5.05	6.25	7.18	7.34	6.63	6.92
Oriental	--	7.00	10.00	7.00	8.09	8.09
Mexican-American	--	9.00	8.50	11.00	9.17	9.17
American Indian	--	--	--	--	--	--
Other	--	6.88	7.00	--	6.92	6.92
Significance	.001	.610	.562	.683	.070	.374
<u>PARENTS AT HOME</u>						
Both	9.57	7.02	7.73	7.33	7.48	7.40
Father Only	--	6.00	--	4.50	6.00	5.25
Mother Only	6.50	5.38	8.05	7.54	6.89	6.92
None	--	8.50	9.50	4.00	8.00	8.00
Significance	.105	.016	.694	.436	.245	.298
<u>READING ACHIEVEMENT</u>						
Above Average	7.25	7.13	8.31	7.75	7.83	7.87
Average	7.83	6.95	7.55	7.01	7.22	7.19
Below Average	6.27	6.05	7.46	7.03	6.88	6.89
Significance	.418	.105	.341	.374	.039	.035
<u>MATH ACHIEVEMENT</u>						
Above Average	8.00	7.29	8.24	7.69	7.89	7.89
Average	7.72	6.80	7.82	7.23	7.35	7.33
Below Average	5.56	6.11	6.60	7.03	6.59	6.61
Significance	.174	.141	.040	.508	.001	.001
<u>AMOUNT OF CAREER EDUCATION</u>						
0	--	--	--	--	--	--
$\frac{1}{2}$ -1	--	6.79	8.05	6.64	7.37	7.37
1 $\frac{1}{2}$ -2	--	6.29	6.63	4.50	5.69	5.69
2 $\frac{1}{2}$ -3	--	6.17	7.00	9.00	6.26	6.26
3 $\frac{1}{2}$ -4	--	--	--	--	--	--
Over 4	--	--	--	7.33	7.33	7.33
Significance	--	.546	.034	.340	.012	.012

TABLE 14

REWARDS FOR WORK

SERVICE TO OTHERS

MEAN SCORES AND LEVELS OF SIGNIFICANCE

INTERMEDIATE FORM

	<u>4</u>	<u>5</u>	<u>6</u>	<u>4-6</u>
<u>SEX</u>				
Male	-2.04	-2.96	-3.72	-2.94
Female	-.98	-.24	-1.24	-.78
Significance	.368	.006	.007	.001
<u>LUNCH PROGRAM</u>				
Yes	-4.44	-2.71	-3.97	
No	-1.18	-1.72	-2.17	
Significance	.099	.452	.126	
<u>SOCIOECONOMIC LEVEL</u>				
High	-1.56	-5.59	-3.75	-1.97
Middle	-1.25	-1.33	-2.10	-1.63
Low	-3.14	-2.65	-4.22	-3.46
Significance	.764	.117	.260	.048
<u>RACE</u>				
Caucasian	-1.37	-1.73	-2.41	-1.93
Black	-5.25	-5.33	-3.38	-3.92
Oriental	--	1.00	--	1.00
Mexican-American	-6.00	-12.50	--	-10.33
American Indian	-1.00	--	2.00	.46
Other	-3.33	-5.00	--	.03
Significance	.810	.315	.857	.070
<u>PARENTS AT HOME</u>				
Both	-1.51	-1.89	-2.56	-1.88
Father Only	--	-4.40	1.67	-.50
Mother Only	-.65	-.94	-2.46	-1.52
None	-2.93	-4.75	-5.67	-2.60
Significance	.618	.678	.571	.834
<u>READING ACHIEVEMENT</u>				
Above Average	-.43	-.86	-.09	-.46
Average	-1.97	-1.98	-3.03	-2.38
Below Average	-2.50	-3.09	-4.45	-3.42
Significance	.391	.290	.001	.002
<u>MATH ACHIEVEMENT</u>				
Above Average	-1.25	-1.08	-.96	-.91
Average	-1.70	-1.89	-2.06	-1.67
Below Average	-1.64	-2.92	-4.65	-3.44
Significance	.704	.502	.005	.003
<u>AMOUNT OF CAREER EDUCATION</u>				
0	1.37	-.95	-1.76	-1.13
$\frac{1}{2}$ -1	-2.52	-3.56	-3.19	-3.09
$1\frac{1}{2}$ -2	-1.51	-1.87	-1.51	-1.18
$2\frac{1}{2}$ -3	-8.00	-1.57	-3.60	-2.24
$3\frac{1}{2}$ -4	--	--	--	--
Over 4	--	-.63	--	-.63
Significance	.211	.326	.340	.030

TABLE 15

REWARDS FOR WORK

PERSONAL SATISFACTIONS

MEAN SCORES AND LEVELS OF SIGNIFICANCE

		PRIMARY FORM					
		K	1	2	3	K-3	1-3
<u>SEX</u>							
	Male	7.17	6.00	6.61	6.34	6.37	6.34
	Female	6.32	5.97	6.12	6.42	6.19	6.17
	Significance	.240	.928	.111	.799	.306	.355
<u>LUNCH PROGRAM</u>							
	Yes	7.30	5.54	6.60	6.41	6.22	6.14
	No	6.35	6.22	6.31	6.37	6.31	6.31
	Significance	.186	.059	.493	.905	.682	.469
<u>SOCIOECONOMIC LEVEL</u>							
	High	--	6.63	6.50	7.91	7.26	7.26
	Middle	6.43	6.04	6.29	6.26	6.23	6.22
	Low	7.14	5.70	6.48	6.00	6.13	6.04
	Significance	.327	.440	.864	.007	.021	.014
<u>RACE</u>							
	Caucasian	6.62	6.24	6.27	6.41	6.30	6.31
	Black	7.30	5.50	6.69	6.31	6.36	6.18
	Oriental	--	4.00	7.75	6.00	5.73	5.73
	Mexican-American	--	4.00	7.00	5.00	5.17	5.17
	American Indian	--	--	--	--	--	--
	Other	--	5.63	7.25	--	6.17	6.17
	Significance	.343	.050	.589	.941	.737	.723
<u>PARENTS AT HOME</u>							
	Both	6.24	6.01	6.36	6.41	6.28	6.28
	Father Only	--	7.00	--	6.00	5.33	6.50
	Mother Only	7.50	5.90	6.05	6.46	6.09	6.10
	None	--	6.00	7.50	3.00	6.00	6.00
	Significance	.491	.931	.626	.587	.700	.901
<u>READING ACHIEVEMENT</u>							
	Above Average	6.38	6.64	6.44	6.69	6.53	6.57
	Average	6.46	5.97	6.53	6.31	6.29	6.28
	Below Average	7.82	5.53	6.14	5.97	6.00	5.90
	Significance	.243	.050	.773	.420	.262	.103
<u>MATH ACHIEVEMENT</u>							
	Above Average	6.22	6.64	6.39	6.19	6.39	6.39
	Average	6.72	5.83	6.39	6.47	6.27	6.24
	Below Average	7.56	5.77	6.39	6.26	6.15	6.13
	Significance	.478	.117	.999	.779	.652	.581
<u>AMOUNT OF CAREER EDUCATION</u>							
	0	--	--	--	--	--	--
	$\frac{1}{2}$ -1	--	6.21	6.42	6.23	6.33	6.33
	1 $\frac{1}{2}$ -2	--	5.83	5.53	6.00	5.69	5.69
	2 $\frac{1}{2}$ -3	--	5.30	5.67	6.00	5.33	5.33
	3 $\frac{1}{2}$ -4	--	--	--	--	--	--
	Over 4	--	--	--	6.58	6.58	6.58
	Significance	--	.171	.075	.827	.003	.003

TABLE 16

REWARDS FOR WORK

PERSONAL SATISFACTIONS

MEAN SCORES AND LEVELS OF SIGNIFICANCE

INTERMEDIATE FORM

	<u>4</u>	<u>5</u>	<u>6</u>	<u>4-6</u>
<u>SEX</u>				
Male	- .99	-1.47	- .84	-1.19
Female	-1.35	- .44	-1.94	-1.25
Significance	.748	.265	.168	.748
<u>LUNCH PROGRAM</u>				
Yes	-2.63	-1.67	-2.22	
No	- .97	- .98	-1.23	
Significance	.373	.574	.336	
<u>SOCIOECONOMIC LEVEL</u>				
High	3.44	-3.65	-1.00	1.80
Middle	-1.37	- .78	-1.18	-1.51
Low	-2.10	-2.06	-2.38	-1.35
Significance	.221	.353	.578	.954
<u>RACE</u>				
Caucasian	-1.23	-1.09	-1.34	-1.21
Black	-2.00	-4.00	-2.50	-2.69
Oriental	--	--	--	--
Mexican-American	-14.00	-8.50	--	-10.33
American Indian	5.00	--	--	5.00
Other	4.00	-5.00	--	.03
Significance	.208	.571	.866	.189
<u>PARENTS AT HOME</u>				
Both	- .89	- .92	-1.40	-1.03
Father Only	--	3.60	-3.00	- .64
Mother Only	-1.65	-4.15	-1.38	-2.45
None	-3.36	-1.63	-2.67	- .60
Significance	.435	.099	.899	.406
<u>READING ACHIEVEMENT</u>				
Above Average	- .06	- .56	-1.09	- .67
Average	-1.28	-1.02	-1.58	-1.30
Below Average	-2.63	-1.94	-1.63	-1.88
Significance	.371	.349	.832	.727
<u>MATH ACHIEVEMENT</u>				
Above Average	.23	- .37	-1.40	- .66
Average	-1.67	- .76	-1.21	-1.07
Below Average	-1.64	-2.57	-1.74	-2.03
Significance	.535	.129	.863	.104
<u>AMOUNT OF CAREER EDUCATION</u>				
0	-1.11	- .51	- .51	- .55
$\frac{1}{2}$ -1	- .70	-1.23	-2.71	-1.87
1 $\frac{1}{2}$ -2	-1.38	-1.77	- .87	-1.05
2 $\frac{1}{2}$ -3	-10.00	- .71	- .98	- .85
3 $\frac{1}{2}$ -4	--	--	--	--
Over 4	--	-3.07	--	-3.07
Significance	.594	.572	.116	.181

TABLE 17

OCCUPATIONAL ESTEEM

AGRICULTURAL/INDUSTRIAL OCCUPATIONS

MEAN SCORES AND LEVELS OF SIGNIFICANCE

PRIMARY FORM

	<u>K</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>K-3</u>	<u>1-3</u>
<u>SEX</u>						
Male	5.21	5.81	6.06	5.96	5.91	5.95
Female	3.58	3.90	3.51	3.44	3.60	3.60
Significance	<u>.019</u>	<u>.001</u>	<u>.001</u>	<u>.001</u>	<u>.001</u>	<u>.001</u>
<u>LUNCH PROGRAM</u>						
Yes	5.10	4.67	4.48	5.40	4.91	4.86
No	3.96	4.94	4.74	4.74	4.76	4.79
Significance	.105	.472	.555	.118	.455	.752
<u>SOCIOECONOMIC LEVEL</u>						
High	--	3.13	5.25	6.00	5.24	5.24
Middle	3.95	5.18	4.78	4.87	4.87	4.91
Low	5.00	4.65	4.41	4.68	4.66	4.58
Significance	.138	<u>.034</u>	.508	.153	.366	.226
<u>RACE</u>						
Caucasian	4.10	4.82	4.68	4.91	4.78	4.80
Black	4.10	4.67	5.05	4.97	4.93	4.90
Oriental	--	6.00	5.75	4.50	5.63	5.64
Mexican-American	--	4.67	2.50	4.00	3.83	3.83
American Indian	--	--	--	--	--	--
Other	--	5.13	5.50	--	5.25	5.25
Significance	.155	.836	.555	.983	.616	.665
<u>PARENTS AT HOME</u>						
Both	3.90	4.83	4.74	4.86	4.77	4.81
Father Only	--	3.50	--	2.00	4.00	2.75
Mother Only	4.50	5.03	4.63	6.00	5.14	5.13
None	--	2.50	2.00	5.00	2.80	2.80
Significance	.705	.444	.340	.111	.145	.077
<u>READING ACHIEVEMENT</u>						
Above Average	5.63	4.58	4.77	5.01	4.85	4.81
Average	3.88	4.63	4.99	5.02	4.81	4.88
Below Average	5.00	3.52	4.28	4.70	4.76	4.73
Significance	.122	.159	.356	.869	.986	.965
<u>MATH ACHIEVEMENT</u>						
Above Average	5.78	4.52	4.75	4.90	4.79	4.74
Average	3.64	4.84	4.68	4.78	4.68	4.76
Below Average	5.56	5.05	4.79	5.10	5.06	5.01
Significance	<u>.013</u>	.567	.967	.764	.288	.550
<u>AMOUNT OF CAREER EDUCATION</u>						
0	--	--	--	--	--	--
$\frac{1}{2}$ -1	--	5.31	4.61	4.85	4.80	4.78
$1\frac{1}{2}$ -2	--	4.48	4.75	3.50	4.59	4.59
$2\frac{1}{2}$ -3	--	4.70	6.00	3.00	4.74	4.74
$3\frac{1}{2}$ -4	--	--	--	--	--	--
Over 4	--	--	--	4.63	4.63	4.63
Significance	--	.244	.642	.766	.886	.913

TABLE 18
OCCUPATIONAL ESTEEM
AGRICULTURAL/INDUSTRIAL OCCUPATIONS
MEAN SCORES AND LEVELS OF SIGNIFICANCE
INTERMEDIATE FORM

	<u>4</u>	<u>5</u>	<u>6</u>	<u>4-6</u>
<u>SEX</u>				
Male	2.70	2.75	1.96	2.36
Female	-6.98	-8.72	-9.56	-8.19
Significance	<u>.001</u>	<u>.001</u>	<u>.001</u>	<u>.001</u>
<u>LUNCH PROGRAM</u>				
Yes	-.81	-2.35	-4.94	
No	-2.58	-2.60	-3.66	
Significance	.503	.880	.396	
<u>SOCIOECONOMIC LEVEL</u>				
High	-6.44	-6.88	3.50	-2.68
Middle	-2.33	-2.20	-3.82	-2.90
Low	-.33	-2.69	-4.58	-3.21
Significance	.339	.115	.461	.814
<u>RACE</u>				
Caucasian	-2.48	-2.60	-3.64	-2.98
Black	-1.75	-7.00	-5.88	-5.61
Oriental	--	3.00	--	3.00
Mexican-American	16.00	-4.00	--	2.67
American Indian	-1.00	--	3.00	-.35
Other	-3.67	-15.00	--	-.33
Significance	.394	.589	.463	.117
<u>PARENTS AT HOME</u>				
Both	-2.95	-2.24	-3.77	-2.75
Father Only	--	-2.40	-5.22	-4.21
Mother Only	1.00	-4.50	-3.46	-2.88
None	-2.43	-9.25	-6.00	-7.00
Significance	.254	.248	.858	.767
<u>READING ACHIEVEMENT</u>				
Above Average	-2.43	-2.75	-2.84	-2.74
Average	-2.53	-2.78	-5.22	-3.72
Below Average	-1.68	-2.14	-3.36	-2.44
Significance	.925	.470	.203	.632
<u>MATH ACHIEVEMENT</u>				
Above Average	-2.78	-3.48	-3.11	-2.90
Average	-2.03	-2.01	-4.71	-2.74
Below Average	-2.67	-2.30	-3.51	-2.84
Significance	.722	.501	.487	.608
<u>AMOUNT OF CAREER EDUCATION</u>				
0	-.63	-3.34	-5.38	-4.05
$\frac{1}{2}$ -1	-3.18	-.30	-2.91	-2.12
1 $\frac{1}{2}$ -2	-2.21	-7.04	-2.06	-2.62
2 $\frac{1}{2}$ -3	-18.00	-1.79	-5.54	-3.11
3 $\frac{1}{2}$ -4	--	--	--	--
Over 4	--	-2.67	--	-2.67
Significance	.332	<u>.006</u>	.106	.387

TABLE 19

OCCUPATIONAL ESTEEM

BUSINESS/MARKETING/MANAGEMENT OCCUPATIONS

MEAN SCORES AND LEVELS OF SIGNIFICANCE

PRIMARY FORM						
	K	1	2	3	K-3	1-3
<u>SEX</u>						
Male	5.29	4.40	4.72	4.42	4.58	4.52
Female	4.74	5.17	5.11	5.25	5.16	5.17
Significance	.226	.007	.149	.005	.001	.001
<u>LUNCH PROGRAM</u>						
Yes	5.55	5.05	5.65	5.29	5.38	5.30
No	4.61	4.70	4.79	4.74	4.74	4.75
Significance	.036	.270	.016	.119	.001	.005
<u>SOCIOECONOMIC LEVEL</u>						
High	--	4.50	5.42	4.77	4.91	4.91
Middle	4.52	4.63	4.68	4.70	4.66	4.68
Low	5.55	5.05	5.63	5.49	5.43	5.36
Significance	.022	.385	.011	.123	.001	.002
<u>RACE</u>						
Caucasian	4.57	4.69	4.65	4.58	4.65	4.64
Black	5.55	5.56	6.44	6.66	6.11	6.21
Oriental	--	5.00	5.00	6.00	5.18	5.18
Mexican-American	--	3.00	7.00	4.00	4.50	4.50
American Indian	--	--	--	--	--	--
Other	--	4.13	4.00	--	4.08	4.08
Significance	.035	.065	.001	.001	.001	.001
<u>PARENTS AT HOME</u>						
Both	4.67	4.57	4.75	4.76	4.71	4.71
Father Only	--	6.00	--	5.00	5.67	5.50
Mother Only	4.00	5.67	5.55	5.15	5.47	5.50
None	--	4.50	9.00	7.00	6.80	6.80
Significance	.503	.018	.003	.670	.001	.001
<u>READING ACHIEVEMENT</u>						
Above Average	5.38	4.73	4.66	4.56	4.67	4.64
Average	4.42	4.63	4.82	4.89	4.74	4.78
Below Average	6.18	5.15	5.45	5.10	5.35	5.25
Significance	.002	.286	.101	.479	.006	.046
<u>MATH ACHIEVEMENT</u>						
Above Average	4.44	4.79	4.60	4.48	4.60	4.61
Average	4.80	4.62	5.01	5.09	4.90	4.91
Below Average	6.33	5.18	5.57	4.83	5.25	5.13
Significance	.008	.254	.041	.301	.011	.065
<u>AMOUNT OF CAREER EDUCATION</u>						
0	--	--	--	--	--	--
$\frac{1}{2}$ -1	--	4.87	5.01	4.71	4.91	4.88
1 $\frac{1}{2}$ -2	--	4.75	4.20	4.00	4.47	4.47
2 $\frac{1}{2}$ -3	--	4.94	5.33	9.00	5.04	5.04
3 $\frac{1}{2}$ -4	--	--	--	--	--	--
Over 4	--	--	--	4.94	4.95	4.95
Significance	--	.888	.057	.261	.265	.291

TABLE 20

OCCUPATIONAL ESTEEM

BUSINESS/MARKETING/MANAGEMENT OCCUPATIONS

MEAN SCORES AND LEVELS OF SIGNIFICANCE

INTERMEDIATE FORM

	<u>4</u>	<u>5</u>	<u>6</u>	<u>4-6</u>
<u>SEX</u>				
Male	-4.51	-5.62	-5.46	-5.18
Female	.36	-1.53	-.90	-.81
Significance	<u>.001</u>	<u>.001</u>	<u>.001</u>	<u>.001</u>
<u>LUNCH PROGRAM</u>				
Yes	-2.75	-2.56	-1.22	
No	-2.05	-4.08	-3.62	
Significance	<u>.745</u>	<u>.249</u>	<u>.043</u>	
<u>SOCIOECONOMIC LEVEL</u>				
High	-2.44	-1.59	-9.50	-1.63
Middle	-1.92	-3.99	-3.58	-3.41
Low	-2.76	-3.31	-1.44	-2.35
Significance	<u>.969</u>	<u>.691</u>	<u>.047</u>	<u>.037</u>
<u>RACE</u>				
Caucasian	-1.90	-3.73	-3.65	-3.33
Black	-5.50	-2.67	1.88	.31
Oriental	--	2.00	--	2.00
Mexican-American	-21.00	-8.00	--	-12.33
American Indian	19.00	--	8.00	.49
Other	-5.00	-8.00	--	-1.28
Significance	<u>.009</u>	<u>.856</u>	<u>.006</u>	<u>.002</u>
<u>PARENTS AT HOME</u>				
Both	-1.86	-3.96	-3.43	-3.08
Father Only	--	--	-1.22	-.79
Mother Only	-3.95	-2.29	-2.28	-2.65
None	-.93	3.13	1.00	-3.60
Significance	<u>.493</u>	<u>.476</u>	<u>.685</u>	<u>.735</u>
<u>READING ACHIEVEMENT</u>				
Above Average	-3.52	-4.42	-4.73	-4.30
Average	-1.62	-3.35	-2.78	-2.66
Below Average	-1.00	-3.41	-1.96	-2.35
Significance	<u>.338</u>	<u>.639</u>	<u>.041</u>	<u>.039</u>
<u>MATH ACHIEVEMENT</u>				
Above Average	-2.88	-3.87	-4.66	-3.62
Average	-1.77	-4.13	-3.36	-2.95
Below Average	-2.00	-3.10	-1.38	-2.17
Significance	<u>.629</u>	<u>.848</u>	<u>.017</u>	<u>.238</u>
<u>AMOUNT OF CAREER EDUCATION</u>				
0	-4.63	-3.16	-2.33	-3.62
$\frac{1}{2}$ -1	-1.76	-4.70	-2.72	-3.14
1 $\frac{1}{2}$ -2	-1.62	-2.52	-4.49	-2.21
2 $\frac{1}{2}$ -3	-6.00	-4.48	-1.32	-3.36
3 $\frac{1}{2}$ -4	--	--	--	--
Over 4	--	-2.33	--	-2.33
Significance	<u>.483</u>	<u>.421</u>	<u>.178</u>	<u>.371</u>

TABLE 21

OCCUPATIONAL ESTEEM

HEALTH OCCUPATIONS

MEAN SCORES AND LEVELS OF SIGNIFICANCE

		PRIMARY FORM					
		K	1	2	3	K-3	1-3
<u>SEX</u>							
	Male	7.00	6.33	5.98	6.52	6.32	6.28
	Female	9.58	8.05	8.21	8.65	8.35	8.31
	Significance	.001	.001	.001	.001	.001	.001
<u>LUNCH PROGRAM</u>							
	Yes	6.95	7.10	6.85	6.79	6.85	6.92
	No	9.17	7.22	7.12	7.70	7.44	7.35
	Significance	.008	.748	.580	.026	.010	.081
<u>SOCIOECONOMIC LEVEL</u>							
	High	--	9.50	7.00	7.27	7.62	7.62
	Middle	9.19	6.99	7.23	7.65	7.40	7.31
	Low	7.14	7.15	6.89	6.94	6.94	7.01
	Significance	.012	.013	.733	.256	.095	.293
<u>RACE</u>							
	Caucasian	9.10	7.30	7.24	7.63	7.43	7.39
	Black	7.00	6.47	6.41	6.19	6.45	6.37
	Oriental	--	5.60	6.50	6.00	6.00	6.00
	Mexican-American	--	8.67	7.50	10.00	8.50	8.50
	American Indian	--	--	--	--	--	--
	Other	--	8.88	7.25	--	8.33	8.33
	Significance	.011	.028	.565	.021	.001	.001
<u>PARENTS AT HOME</u>							
	Both	9.19	7.34	7.25	7.67	7.46	7.41
	Father Only	--	8.50	--	8.00	7.50	8.25
	Mother On'y	9.00	6.46	6.82	6.31	6.57	6.55
	None	--	8.50	7.00	9.00	8.00	8.00
	Significance	.898	.151	.695	.093	.015	.021
<u>READING ACHIEVEMENT</u>							
	Above Average	6.88	7.67	7.38	7.92	7.60	7.62
	Average	9.38	7.58	7.28	7.06	7.48	7.31
	Below Average	3.36	6.21	6.64	7.45	6.66	6.75
	Significance	.002	.001	.237	.249	.002	.014
<u>MATH ACHIEVEMENT</u>							
	Above Average	7.44	7.74	7.52	7.83	7.64	7.65
	Average	9.24	7.39	7.04	7.43	7.41	7.26
	Below Average	5.78	6.36	6.40	7.35	6.65	6.78
	Significance	.002	.004	.104	.584	.001	.009
<u>AMOUNT OF CAREER EDUCATION</u>							
	0	--	--	--	--	--	--
	$\frac{1}{2}$ -1	--	7.13	7.54	7.46	7.42	7.46
	1 $\frac{1}{2}$ -2	--	7.46	6.14	7.50	6.82	6.82
	2 $\frac{1}{2}$ -3	--	7.19	6.67	5.00	7.12	7.12
	3 $\frac{1}{2}$ -4	--	--	--	--	--	--
	Over 4	--	--	--	7.26	7.26	7.26
	Significance	--	.769	.009	.813	.249	.190

TABLE 22

OCCUPATIONAL ESTEEM

HEALTH OCCUPATIONS

MEAN SCORES AND LEVELS OF SIGNIFICANCE

INTERMEDIATE FORM

	<u>4</u>	<u>5</u>	<u>6</u>	<u>4-6</u>
<u>SEX</u>				
Male	.21	.63	1.35	.74
Female	7.18	8.53	8.64	7.69
Significance	<u>.001</u>	<u>.001</u>	<u>.001</u>	<u>.001</u>
<u>LUNCH PROGRAM</u>				
Yes	3.13	3.58	4.30	
No	4.06	4.26	5.25	
Significance	.689	.649	.476	
<u>SOCIOECONOMIC LEVEL</u>				
High	7.89	3.59	8.25	2.22
Middle	3.75	4.15	5.24	4.52
Low	2.95	3.98	4.36	4.00
Significance	.470	.317	.222	<u>.009</u>
<u>RACE</u>				
Caucasian	3.88	4.14	5.03	4.42
Black	6.75	7.33	4.38	5.14
Oriental	--	-3.00	--	-3.00
Mexican-American	3.00	12.50	--	9.33
American-Indian	--	--	--	--
Other	5.67	11.00	--	7.48
Significance	.947	.503	.584	.657
<u>PARENTS AT HOME</u>				
Both	4.38	4.03	5.03	4.02
Father Only	--	-3.40	6.11	2.71
Mother Only	2.40	4.79	4.28	4.07
None	2.14	9.88	6.33	10.20
Significance	.467	<u>.047</u>	.882	.628
<u>READING ACHIEVEMENT</u>				
Above Average	5.00	4.61	5.54	4.92
Average	3.79	4.29	5.69	4.70
Below Average	2.78	3.52	3.69	3.22
Significance	.682	.679	.225	<u>.019</u>
<u>MATH ACHIEVEMENT</u>				
Above Average	4.70	4.63	5.66	4.45
Average	3.52	4.10	5.41	3.83
Below Average	4.00	3.80	3.83	3.80
Significance	.809	.855	.315	.636
<u>AMOUNT OF CAREER EDUCATION</u>				
0	4.47	4.87	5.68	5.11
$\frac{1}{2}$ -1	4.08	3.27	3.88	3.68
1 $\frac{1}{2}$ -2	3.70	6.58	6.15	3.81
2 $\frac{1}{2}$ -3	11.00	3.87	4.84	4.10
3 $\frac{1}{2}$ -4	--	--	--	--
Over 4	--	2.60	--	2.60
Significance	.852	.254	.359	.430

TABLE 23

OCCUPATIONAL ESTEEM

PERSONAL/PUBLIC SERVICE OCCUPATIONS

MEAN SCORES AND LEVELS OF SIGNIFICANCE

	PRIMARY FORM					
	K	1	2	3	K-3	1-3
<u>SEX</u>						
Male	6.50	7.34	7.02	6.94	7.03	7.07
Female	6.11	6.56	6.28	6.58	6.44	6.45
Significance	.453	.001	.006	.210	.001	.001
<u>LUNCH PROGRAM</u>						
Yes	6.40	6.95	5.98	6.48	6.51	6.51
No	6.26	6.93	6.76	6.76	6.77	6.80
Significance	.791	.922	.035	.431	.138	.127
<u>SOCIOECONOMIC LEVEL</u>						
High	--	6.50	6.33	5.86	6.12	6.12
Middle	6.33	6.96	6.78	6.71	6.78	6.80
Low	6.32	6.92	6.18	6.87	6.63	6.66
Significance	.977	.743	.180	.188	.115	.111
<u>RACE</u>						
Caucasian	6.24	6.90	6.73	6.72	6.75	6.77
Black	6.40	7.28	6.10	6.16	6.49	6.51
Oriental	--	7.40	6.75	7.50	7.18	7.18
Mexican-American	--	7.67	7.00	6.00	7.17	7.17
American Indian	--	--	--	--	--	--
Other	--	5.88	7.25	--	6.33	6.33
Significance	.756	.207	.542	.558	.563	.624
<u>PARENTS AT HOME</u>						
Both	6.24	7.03	6.57	6.99	6.72	6.74
Father Only	--	6.00	--	9.00	6.83	7.50
Mother Only	6.50	6.67	7.00	6.19	6.68	6.67
None	--	8.50	6.00	3.00	6.40	6.40
Significance	.849	.273	.500	.104	.981	.854
<u>READING ACHIEVEMENT</u>						
Above Average	6.13	6.91	6.39	6.50	6.51	6.54
Average	6.33	6.95	6.85	6.92	6.85	6.90
Below Average	6.45	7.00	6.68	6.45	6.72	6.71
Significance	.919	.961	.210	.499	.168	.160
<u>MATH ACHIEVEMENT</u>						
Above Average	6.33	6.74	6.38	6.75	6.55	6.56
Average	6.32	6.89	7.05	6.60	6.82	6.87
Below Average	6.33	7.23	6.10	6.70	6.71	6.73
Significance	.999	.295	.014	.925	.315	.257
<u>AMOUNT OF CAREER EDUCATION</u>						
0	--	--	--	--	--	--
$\frac{1}{2}$ -1	--	6.67	6.78	6.91	6.81	6.82
$1\frac{1}{2}$ -2	--	7.04	6.10	9.00	6.62	6.62
$2\frac{1}{2}$ -3	--	7.15	6.00	7.00	7.09	7.09
$3\frac{1}{2}$ -4	--	--	--	--	--	--
Over 4	--	--	--	7.09	7.09	7.09
Significance	--	.363	.126	.588	.411	.414

TABLE 24

OCCUPATIONAL ESTEEM

PERSONAL/PUBLIC SERVICE OCCUPATIONS

MEAN SCORES AND LEVELS OF SIGNIFICANCE

INTERMEDIATE FORM

	<u>4</u>	<u>5</u>	<u>6</u>	<u>4-6</u>
<u>SEX</u>				
Male	1.45	1.89	1.88	1.77
Female	-.98	1.57	1.64	1.05
Significance	.024	.688	.755	.122
<u>LUNCH PROGRAM</u>				
Yes	.62	.88	1.92	
No	.24	2.25	1.71	
Significance	.832	.203	.834	
<u>SOCIOECONOMIC LEVEL</u>				
High	1.56	5.18	-2.25	1.80
Middle	.11	1.85	1.88	1.51
Low	.24	1.45	1.64	1.35
Significance	.939	.231	.696	.954
<u>RACE</u>				
Caucasian	.20	1.92	1.98	1.61
Black	1.00	2.83	-.08	.53
Oriental	--	-2.00	--	-2.00
Mexican-American	1.00	--	--	1.00
American Indian	-8.00	--	-10.00	-8.93
Other	2.67	13.00	--	7.68
Significance	.753	.511	.170	.885
<u>PARENTS AT HOME</u>				
Both	.05	1.93	1.90	1.49
Father Only	--	5.80	.11	2.42
Mother Only	.75	1.44	1.51	1.32
None	1.00	2.25	-1.67	.20
Significance	.826	.758	.841	.984
<u>READING ACHIEVEMENT</u>				
Above Average	1.13	2.37	1.66	1.85
Average	-.03	1.61	2.10	1.41
Below Average	-.40	1.70	1.53	1.33
Significance	.576	.832	.814	.932
<u>MATH ACHIEVEMENT</u>				
Above Average	.70	2.73	1.78	1.83
Average	.07	1.56	2.36	1.48
Below Average	.22	1.31	1.02	1.01
Significance	.784	.406	.356	.566
<u>AMOUNT OF CAREER EDUCATION</u>				
0	.58	1.21	3.30	2.32
$\frac{1}{2}$ -1	.52	1.57	1.48	1.33
$1\frac{1}{2}$ -2	-.16	3.06	.06	.68
$2\frac{1}{2}$ -3	14.00	2.01	1.84	2.05
$3\frac{1}{2}$ -4	--	--	--	--
Over 4	--	2.27	--	2.27
Significance	.206	.660	.027	.073

TABLE 25

CAREER CATEGORIES

MEAN SCORES AND LEVELS OF SIGNIFICANCE

PRIMARY FORM						
	<u>K</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>K-3</u>	<u>1-3</u>
<u>SEX</u>						
Male	9.75	9.74	12.45	12.49	11.62	11.74
Female	8.79	8.94	11.46	11.86	10.76	10.87
Significance	.269	.090	.011	.096	.001	.001
<u>LUNCH PROGRAM</u>						
Yes	8.35	7.68	10.69	11.29	9.65	9.76
No	10.17	10.19	11.98	12.44	11.59	11.65
Significance	.031	.001	.008	.016	.001	.001
<u>SOCIOECONOMIC LEVEL</u>						
High	--	10.00	11.83	12.82	12.00	12.00
Middle	10.05	10.20	12.21	12.41	11.72	11.78
Low	8.64	7.68	10.91	10.91	9.56	9.65
Significance	.099	.001	.025	.008	.001	.001
<u>RACE</u>						
Caucasian	10.00	10.02	11.97	12.45	11.55	11.61
Black	8.35	6.92	11.13	10.13	9.27	9.41
Oriental	--	9.00	13.75	11.00	11.09	11.09
Mexican-American	--	9.67	13.00	12.00	11.17	11.17
American Indian	--	--	--	--	--	--
Other	--	8.63	12.25	--	9.83	9.83
Significance	.055	.001	.400	.001	.001	.001
<u>PARENTS AT HOME</u>						
Both	10.10	9.73	12.00	12.33	11.42	11.47
Father Only	--	12.50	--	10.50	11.00	12.00
Mother Only	11.00	8.33	11.74	13.04	10.57	10.47
None	--	3.50	11.50	9.00	7.80	7.80
Significance	.595	.003	.873	.610	.012	.004
<u>READING ACHIEVEMENT</u>						
Above Average	9.38	10.31	12.54	13.21	12.17	12.29
Average	10.17	9.73	11.88	12.26	11.23	11.30
Below Average	7.45	8.23	11.16	10.80	10.01	10.13
Significance	.025	.002	.039	.001	.001	.001
<u>MATH ACHIEVEMENT</u>						
Above Average	9.56	10.07	12.53	13.17	12.05	12.17
Average	10.00	9.95	11.78	12.45	11.33	11.42
Below Average	7.22	7.88	10.90	11.06	9.83	9.95
Significance	.033	.001	.016	.001	.001	.001
<u>AMOUNT OF CAREER EDUCATION</u>						
0	--	--	--	--	--	--
$\frac{1}{2}$ -1	--	9.72	11.68	12.02	11.58	11.59
1 $\frac{1}{2}$ -2	--	9.02	12.55	11.50	10.78	10.78
2 $\frac{1}{2}$ -3	--	8.83	12.00	10.00	9.02	9.02
3 $\frac{1}{2}$ -4	--	--	--	--	--	--
Over 4	--	--	--	11.77	11.77	11.77
Significance	--	.481	.255	.870	.001	.001

TABLE 26

CAREER CATEGORIES

MEAN SCORES AND LEVELS OF SIGNIFICANCE

INTERMEDIATE FORM

	<u>4</u>	<u>5</u>	<u>6</u>	<u>4-6</u>
<u>SEX</u>				
Male	10.62	10.83	11.92	10.92
Female	10.00	10.80	11.76	10.58
Significance	.174	.924	.588	.144
<u>LUNCH PROGRAM</u>				
Yes	9.13	10.71	10.25	
No	10.54	11.17	12.18	
Significance	.050	.286	.001	
<u>SOCIOECONOMIC LEVEL</u>				
High	10.11	11.71	11.00	10.48
Middle	10.61	11.11	12.23	11.48
Low	8.81	10.57	10.23	10.14
Significance	.052	.013	.001	.056
<u>RACE</u>				
Caucasian	10.43	11.05	12.06	11.35
Black	9.25	7.83	9.04	8.86
Oriental	--	2.00	--	2.00
Mexican-American	8.00	11.50	--	10.33
American Indian	9.00	--	12.00	10.50
Other	7.33	13.00	--	10.16
Significance	.307	.001	.001	.001
<u>PARENTS AT HOME</u>				
Both	10.42	11.08	12.10	10.60
Father Only	--	9.00	11.00	10.29
Mother Only	9.35	11.08	10.18	10.33
None	10.71	8.00	9.33	10.20
Significance	.262	.018	.001	.771
<u>READING ACHIEVEMENT</u>				
Above Average	10.98	12.09	12.87	12.02
Average	10.01	10.55	11.86	10.87
Below Average	10.13	9.87	10.64	10.05
Significance	.062	.001	.001	.001
<u>MATH ACHIEVEMENT</u>				
Above Average	10.73	11.83	13.10	11.15
Average	10.31	10.94	11.85	10.31
Below Average	9.86	9.98	10.43	10.14
Significance	.628	.001	.001	.005
<u>AMOUNT OF CAREER EDUCATION</u>				
0	10.84	10.21	11.76	11.11
$\frac{1}{2}$ -1	10.68	11.01	11.36	11.06
1 $\frac{1}{2}$ -2	10.04	11.77	12.08	11.68
2 $\frac{1}{2}$ -3	8.00	11.09	12.70	11.37
3 $\frac{1}{2}$ -4	--	--	--	--
Over 4	--	10.67	--	10.67
Significance	.407	.058	.022	.001

TABLE 27

OCCUPATIONAL RESPONSIBILITIES

MEAN SCORES AND LEVELS OF SIGNIFICANCE

PRIMARY FORM						
	<u>K</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>K-3</u>	<u>1-3</u>
<u>SEX</u>						
Male	10.00	11.37	14.35	14.29	13.32	13.53
Female	9.42	10.78	13.35	14.89	12.92	13.12
Significance	.552	.230	.020	.214	.151	.153
<u>LUNCH PROGRAM</u>						
Yes	8.65	9.84	12.60	13.34	11.52	11.83
No	10.70	11.63	13.85	15.15	13.57	13.70
Significance	.030	.001	.028	.001	.001	.001
<u>SOCIOECONOMIC LEVEL</u>						
High	--	13.25	16.25	15.32	15.19	15.19
Middle	10.52	11.68	13.85	14.98	13.56	13.69
Low	9.00	9.86	12.79	12.98	11.42	11.70
Significance	.110	.001	.006	.004	.001	.001
<u>RACE</u>						
Caucasian	10.38	11.60	14.06	15.03	13.60	13.73
Black	8.65	9.75	12.46	12.41	11.11	11.53
Oriental	--	9.80	12.50	15.50	11.82	11.82
Mexican-American	--	11.33	13.00	10.00	11.67	11.67
American Indian	--	--	--	--	--	--
Other	--	9.00	11.50	--	9.83	9.83
Significance	.065	.014	.059	.002	.001	.001
<u>PARENTS AT HOME</u>						
Both	10.71	11.31	13.82	14.92	13.36	13.47
Father Only	--	15.00	--	10.50	12.67	12.75
Mother Only	10.50	9.97	13.92	13.04	12.25	12.20
None	--	14.50	13.00	9.00	12.80	12.80
Significance	.924	.026	.932	.019	.051	.023
<u>READING ACHIEVEMENT</u>						
Above Average	10.50	11.84	14.53	16.22	14.38	14.53
Average	9.88	11.79	13.86	14.58	13.15	13.42
Below Average	8.91	9.65	12.89	12.72	11.69	11.82
Significance	.533	.001	.001	.001	.001	.001
<u>MATH ACHIEVEMENT</u>						
Above Average	11.67	11.69	14.51	15.83	14.13	14.25
Average	9.40	11.73	13.64	15.43	13.30	13.58
Below Average	8.78	9.64	12.26	12.58	11.41	11.52
Significance	.099	.001	.002	.001	.001	.001
<u>AMOUNT OF CAREER EDUCATION</u>						
0	--	--	--	--	--	--
$\frac{1}{2}$ -1	--	11.18	13.57	14.23	13.54	13.55
1 $\frac{1}{2}$ -2	--	10.96	13.41	14.00	12.21	12.21
2 $\frac{1}{2}$ -3	--	11.15	7.33	18.00	11.07	11.07
3 $\frac{1}{2}$ -4	--	--	--	--	--	--
Over 4	--	--	--	13.93	13.93	13.93
Significance	--	.646	.006	.019	.001	.001

TABLE 28

OCCUPATIONAL RESPONSIBILITIES

MEAN SCORES AND LEVELS OF SIGNIFICANCE

INTERMEDIATE FORM

	<u>4</u>	<u>5</u>	<u>6</u>	<u>4-6</u>
<u>SEX</u>				
Male	12.09	13.07	14.35	13.20
Female	11.83	12.85	14.24	12.84
Significance	.614	.554	.737	.142
<u>LUNCH PROGRAM</u>				
Yes	11.13	12.94	12.44	
No	12.14	13.16	14.74	
Significance	.224	.655	.001	
<u>SOCIOECONOMIC LEVEL</u>				
High	12.11	13.47	16.25	
Middle	12.03	13.08	14.72	13.57
Low	11.76	13.02	12.38	12.52
Significance	.564	.204	.001	
<u>RACE</u>				
Caucasian	11.97	13.10	14.58	13.47
Black	11.50	10.00	11.12	10.97
Oriental	--	6.00	--	6.00
Mexican-American	11.00	15.00	--	13.67
American Indian	13.00	--	13.00	13.00
Other	11.00	11.00	--	11.00
Significance	.970	.016	.001	.001
<u>PARENTS AT HOME</u>				
Both	12.16	13.23	14.61	12.99
Father Only	--	9.60	13.56	12.14
Mother Only	11.35	12.44	12.38	12.18
None	10.79	10.50	12.69	11.80
Significance	.212	.005	.001	.004
<u>READING ACHIEVEMENT</u>				
Above Average	13.20	14.72	15.84	14.71
Average	11.34	12.65	14.55	13.08
Below Average	11.38	11.29	12.38	11.68
Significance	.004	.001	.001	.001
<u>MATH ACHIEVEMENT</u>				
Above Average	12.98	14.43	15.95	13.99
Average	11.61	12.78	14.46	12.46
Below Average	11.33	11.79	12.36	12.00
Significance	.084	.001	.001	.001
<u>AMOUNT OF CAREER EDUCATION</u>				
0	11.74	11.77	13.82	12.84
$\frac{1}{2}$ -1	12.68	12.70	14.37	13.49
1 $\frac{1}{2}$ -2	11.61	13.79	14.61	11.66
2 $\frac{1}{2}$ -3	11.00	13.60	14.72	13.80
3 $\frac{1}{2}$ -4	--	--	--	--
Over 4	--	13.30	--	13.30
Significance	.280	.002	.242	.001

TABLE 29

WORLD OF WORK VOCABULARY

MEAN SCORES AND LEVELS OF SIGNIFICANCE

	PRIMARY FORM					
	K	1	2	3	K-3	1-3
<u>SEX</u>						
Male	5.42	6.56	11.85	12.46	10.41	10.67
Female	5.84	7.08	11.29	12.98	10.42	10.65
Significance	.538	.259	.251	.339	.986	.937
<u>LUNCH PROGRAM</u>						
Yes	4.64	6.05	8.98	11.45	8.46	8.73
No	6.43	7.31	12.06	13.26	10.99	11.19
Significance	.007	.012	.001	.008	.001	.001
<u>SOCIOECONOMIC LEVEL</u>						
High	--	10.38	13.17	14.09	12.00	13.12
Middle	6.52	6.94	12.11	13.26	11.72	11.22
Low	4.73	6.12	9.36	10.83	9.56	8.50
Significance	.006	.002	.001	.001	.001	.001
<u>RACE</u>						
Caucasian	6.24	7.16	12.09	13.37	11.55	11.21
Black	4.65	5.58	8.56	9.47	9.27	7.83
Oriental	--	7.80	12.25	9.47	11.09	10.64
Mexican-American	--	5.33	10.00	11.00	11.17	7.83
American Indian	--	--	--	--	--	--
Other	--	6.13	8.75	--	9.83	7.00
Significance	.016	.074	.001	.001	.001	.001
<u>PARENTS AT HOME</u>						
Both	6.66	6.89	11.95	13.25	11.42	10.95
Father Only	--	8.00	--	11.00	11.00	9.50
Mother Only	4.00	6.59	10.00	10.04	10.57	8.72
None	--	6.00	12.00	7.00	7.80	8.60
Significance	.135	.883	.016	.003	.012	.001
<u>READING ACHIEVEMENT</u>						
Above Average	7.25	8.58	13.72	15.07	12.17	13.08
Average	5.63	6.63	11.56	13.31	11.23	10.51
Below Average	4.36	5.94	8.96	9.63	10.01	8.22
Significance	.016	.001	.001	.001	.001	.001
<u>MATH ACHIEVEMENT</u>						
Above Average	7.00	8.19	13.77	14.71	12.05	12.81
Average	5.64	6.90	10.81	13.92	11.33	10.53
Below Average	4.11	5.77	8.36	10.20	9.83	8.25
Significance	.018	.001	.001	.001	.001	.001
<u>AMOUNT OF CAREER EDUCATION</u>						
0	--	--	--	--	--	--
$\frac{1}{2}$ -1	--	7.31	11.33	12.91	11.58	11.48
1 $\frac{1}{2}$ -2	--	6.65	11.90	13.50	10.78	9.33
2 $\frac{1}{2}$ -3	--	6.80	4.33	14.00	9.02	6.79
3 $\frac{1}{2}$ -4	--	--	--	--	--	--
Over 4	--	--	--	10.86	11.77	10.86
Significance		.646	.006	.019	.001	.001

TABLE 30

WORLD OF WORK VOCABULARY
MEAN SCORES AND LEVELS OF SIGNIFICANCE

INTERMEDIATE FORM

	<u>4</u>	<u>5</u>	<u>6</u>	<u>4-6</u>
<u>SEX</u>				
Male	17.95	19.72	22.87	20.09
Female	16.75	20.28	23.61	19.94
Significance	.171	.482	.311	.771
<u>LUNCH PROGRAM</u>				
Yes	15.25	20.46	19.44	
No	17.64	20.46	24.08	
Significance	.094	.999	.001	
<u>SOCIOECONOMIC LEVEL</u>				
High	18.44	22.06	25.25	12.28
Middle	17.52	20.29	24.12	21.37
Low	15.38	20.51	19.34	19.17
Significance	.286	.074	.001	
<u>RACE</u>				
Caucasian	17.51	20.35	23.65	21.10
Black	10.25	19.33	18.92	18.03
Oriental	--	5.00	--	5.00
Mexican-American	18.00	21.00	--	20.00
American Indian	22.00	--	24.00	23.00
Other	10.67	17.00	--	13.48
Significance	.018	.209	.004	.001
<u>PARENTS AT HOME</u>				
Both	17.91	20.70	23.71	19.86
Father Only	--	13.80	19.56	17.50
Mother Only	15.78	19.29	20.95	19.22
None	13.21	14.63	20.67	20.20
Significance	.004	.012	.056	.007
<u>READING ACHIEVEMENT</u>				
Above Average	20.81	24.75	28.27	24.98
Average	16.49	19.41	23.03	20.02
Below Average	13.78	15.38	18.07	15.98
Significance	.001	.001	.001	.001
<u>MATH ACHIEVEMENT</u>				
Above Average	19.85	24.06	28.22	22.92
Average	17.43	19.96	22.95	18.76
Below Average	13.58	16.02	18.35	16.68
Significance	.001	.005	.001	.001
<u>AMOUNT OF CAREER EDUCATION</u>				
0 0	16.84	18.64	21.67	19.97
$\frac{1}{2}$ -1	16.76	18.97	23.37	20.64
$1\frac{1}{2}$ -2	17.64	22.58	24.48	17.22
$2\frac{1}{2}$ -3	11.00	20.68	24.44	21.42
$3\frac{1}{2}$ -4	--	--	--	--
Over 4	--	21.47	--	21.47
Significance	.529	.005	.002	.001

ITEM ANALYSIS

To determine the effectiveness of the individual items in the CERT, an item analysis was conducted using the data gathered during the Joliet Pilot Study. The method of analysis used was the "Johnson U-L Index," a procedure developed by A. Pemberton Johnson and widely used in test development. In applying this method, the response pattern of students scoring in the upper 27% of a particular subtest is compared with the response pattern of students scoring in the lower 27%. The percentage of students in each group responding to each item (or each alternative for each item) is determined and the difference between these percentages provides an index of the item's effectiveness.

In general, an index value of .29 or greater (for the correct response) is considered to indicate adequate discrimination. Other considerations such as actual percentages, intent of the item, content considerations, and the like must also be weighed before making a final decision regarding a particular item.

Tables 31 through 38 present the results of this item analysis. In these tables, the columns labeled "L" contain the percentage of students in the lower 27% group responding to each item or each alternative; the columns labeled "U" contain the percentage of students in the upper 27% group responding to each item or each alternative; the columns labeled "D" contain the differences between these percentages (column "U" minus column "L"); the columns labeled "A" contain the percentages of all students who took the tests responding to each item or each alternative.

The remainder of this section will be devoted to the project staff's

item by item recommendations based on this analysis. A recommendation of "retain" indicates that the item is performing adequately from a statistical point of view and may be retained in its present form. A recommendation of "omit" indicates unacceptable statistics and that the item should be omitted or completely revised. A "borderline" recommendation indicates that either minor revision is called for or that the statistics are inconclusive and that additional testing and analysis should be conducted.

PRIMARY FORM

Part I - Sex Role Stereotyping

NOTE: Since the purpose of this subtest is to identify those students who think of occupations in terms of sex role stereotypes, the items used for the "accuracy check" should be easy. With the exception of items 8, 10, 22, and 32 which may be too difficult, all of the items used for the "accuracy check" meet this requirement. The following recommendations refer to those items used to determine the "stereotyping" score.

<u>Item</u>	<u>Recommendation</u>
2	omit - satisfactory discrimination but U% too low
6	omit - satisfactory discrimination but U% too low
9	borderline - satisfactory discrimination but U% is low
11	retain
13	retain
15	borderline - U% tends to decrease as grade level increases
21	retain

STU

<u>Item</u>	<u>Recommendation</u>
23	borderline - U% decreases with increasing grade level - good K and 1st grades, borderline for 2nd grade, poor for 3rd grade
26	retain
30	retain
31	omit - fails to identify biased students
34	retain
38	borderline - effective for grades K and 1, low U% for grade 2, poor for grade 3
40	omit - only effective for grades K and 1
47	borderline - high L% but effectiveness increases with increasing grade level
48	retain

Summary

Based on the above recommendations it may be seen that it is necessary to omit only one full item (i.e. one page-person) from this subtest. If items 31 and 40 are revised, the remainder of the subtest may be retained in its present form and retested for additional analysis.

Part II - Rewards for Work, Part III - Occupational Esteem

The U-L Index method of item analysis is only appropriate for items in which there is a "correct" answer. Since Parts II and III are concerned with attitudes, there is no "correct" answer for the items and therefore item analysis procedures were not employed.

Part IV - Occupational Categories

<u>Item</u>	<u>Recommendation</u>
2A	omit - unsatisfactory discrimination
2B	omit - too difficult for all students
3A	retain
3B	omit - satisfactory discrimination but L% too high for grades 2 and 3
4A	retain
4B	omit - L% too high
5A	borderline - unsatisfactory discrimination for grades K and 3
5B	retain
6A	retain
6B	omit - too easy for all students
7A	retain
7B	retain
8A	retain
8B	omit - too easy for all students
9A	retain
9B	borderline - considerable variance in percentages
10A	borderline - option 3 attracting too many U students
10B	borderline - option 5 attracting too many U students
11A	omit - too easy for all students
11B	omit - U% too low

Summary

Of the 20 items in this subtest, 8 may be retained in their present form; 8 should be omitted; 4 are in need of at least some revision.

Since adequate reliability would be most difficult to establish for a test of only 12 items, additional items should be constructed for this subtest.

Part V - Occupational Responsibilities

<u>Item</u>	<u>Recommendation</u>
3A	omit - too easy for all students
3B	borderline - satisfactory discrimination but U% too high for grades 2 and 3
4A	omit - too easy for all students
4B	omit - too easy for all students
5A	borderline - satisfactory for grades K and 1 - borderline discrimination and L% for grades 2 and 3
5B	omit - too easy for all students
6A	omit - too easy for all students
6B	borderline - satisfactory discrimination but high L%
7A	retain
7B	retain - unsatisfactory discrimination for grade 2 but satisfactory for other grades
8A	omit - unsatisfactory discrimination
8B	borderline - satisfactory discrimination but L% tends to be high
9A	retain
9B	borderline - satisfactory discrimination but L% is high for grades 2 and 3
10A	borderline - satisfactory discrimination but L% tends to be high

<u>Item</u>	<u>Recommendation</u>
10B	borderline - satisfactory discrimination but L% tends to be high
11A	retain
11B	borderline - unsatisfactory discrimination for grade K - L% too high for grades 2 and 3
12A	retain
12B	retain

Summary

As may be seen in the above recommendations, this subtest is in need of extensive revision. Of the ten two-part questions, only four should be retained in their entirety and two of these have one part that is at least questionable. Perhaps the most efficient way to improve this subtest would be to keep the items that are effective and not attempt to revise the others. To accumulate enough items to insure adequate test length for reliability purposes, some of the "easier" but effective items from the intermediate form could be added to this form.

Part VI - World of Work Vocabulary

<u>Item</u>	<u>Recommendation</u>
3	borderline - effective for grades 2 and 3 - not effective for grades K and 1
4	retain
5	retain
6	omit - only satisfactory for grade 1
7	retain
8	borderline - satisfactory for grades 2 and 3 but not for grades K and 1

<u>Item</u>	<u>Recommendation</u>
9	omit - generally unsatisfactory discrimination
10	retain
11	retain
12	borderline - satisfactory discrimination but L% too high for grades 2 and 3
13	borderline - satisfactory for grades 2 and 3 but not for grades K and 1
14	omit - unsatisfactory discrimination
15	omit - satisfactory discrimination but L% generally too high
16	retain
17	borderline - satisfactory for grades 2 and 3 but not for grades K and 1
18	omit - too easy for all students
19	retain
20	retain
22	retain
23	borderline - satisfactory for grades K and 1 - L% too high for grades 2 and 3

Summary

Of the twenty one items in this subtest, ten may be retained in their present form; six may be retained in their present form due to their effectiveness with two of the four grade levels involved; the remaining five items are not acceptable in their present form. Removing the five unacceptable items would leave fourteen items that are effective for grades 2 and 3 and twelve items that are effective for grades K and 1.

To establish acceptable reliability, the staff recommends that additional items be constructed to bring the total of effective items for all grade levels to eighteen to twenty.

INTERMEDIATE FORM

Part I - Sex Role Stereotyping

NOTE: Since the purpose of this subtest is to identify those students who think of occupations in terms of sex role stereotypes, the items used for the "accuracy check" should be easy. With the exception of item 14A, which may be too difficult, all of the items used for the "accuracy check" meet this requirement. The following recommendations refer to those items used to determine the "stereotyping" score.

<u>Item</u>	<u>Recommendation</u>
7B	retain
8C	retain
9C	borderline - satisfactory discrimination but low U%
10B	borderline - satisfactory discrimination but high L%
11A	omit - discrimination close to satisfactory but U% too low
11C	omit - unsatisfactory discrimination and U% too low
13C	retain
14B	omit - unsatisfactory discrimination and U% too low
15B	retain
16C	retain
17A	omit - unsatisfactory discrimination and U% too low
18A	retain
19B	borderline - satisfactory discrimination but low U%

<u>Item</u>	<u>Recommendation</u>
20A	borderline - satisfactory discrimination but low U%
22B	borderline - satisfactory discrimination but high L%
22C	retain

Summary

Based on the above observations it appears that the power of this subtest could be increased if rather substantial revisions are made. The item (person) on page 6 is the only one that needs to be omitted in its entirety. The remainder of the items could be improved by presenting 3 occupations per person rather than the present 6. The three per person, of course, would be the ones that produced the best statistical results. To insure adequate reliability, additional items would then need to be constructed.

Part II - Rewards for Work, Part III - Occupational Esteem

The U-L Index method of item analysis is only appropriate for items in which there is a "correct" answer. Since Parts II and III are concerned with attitudes, there is no "correct" answer for the items and therefore item analysis procedures were not employed.

Part IV - Career Categories

<u>Item</u>	<u>Recommendation</u>
3	omit - too easy for all students
4	borderline - satisfactory discrimination - U% for option A is too high
5	borderline - satisfactory discrimination but high L%
6	retain

<u>Item</u>	<u>Recommendation</u>
7	borderline - satisfactory discrimination but high L% - option A not functioning
8	a printing error rendered this item invalid
9	borderline - satisfactory discrimination but high L%
10	omit - borderline discrimination - L% too high
11	borderline - satisfactory discrimination but high L%
12	borderline - satisfactory discrimination but high L% - option D not functioning
13	borderline - satisfactory discrimination but options B and E are attracting a high U%
14	borderline - satisfactory discrimination but option D is attracting a high U% and option E is not functioning
15	borderline - option C is attracting too many students
16	borderline - option E is attracting too many students
17	omit - too easy for all students
18	omit - too easy for all students
19	omit - too easy for all students
20	retain
21	omit - too difficult for all students
22	retain - difficult for all students but good discrimination

Summary

Of the 19 valid items in the test booklet, six are not functioning adequately and should be omitted; three should be retained in their present form; ten are in need of at least some revision. Additional items will need to be constructed to insure adequate reliability.

Part V - Occupational Responsibilities

<u>Item</u>	<u>Recommendation</u>
5	retain
6	omit - too easy for all students
7	retain
8	omit - too easy for all students
9	omit - too easy for all students
10	borderline - satisfactory discrimination for grade 6 - low U% for grades 4 and 5 - option C is attracting a high U%
11	retain
12	omit - satisfactory discrimination but L% too high
13	omit - satisfactory discrimination but L% too high
14	borderline - satisfactory discrimination but low U%
15	retain
16	borderline - satisfactory discrimination but high L%, especially for grade 6
17	omit - too easy for all students
18	borderline - satisfactory discrimination but high L%, especially for grade 6
19	omit - too easy for all students
20	retain
21	borderline - satisfactory discrimination but high L%
22	omit - too easy for all students

Summary

In this subtest there are two items for each of ten occupations listed. For each occupation we have recommended retaining one item and

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either omitting or revising the other item. The obvious solution would be to retain the one good item for each occupation and delete the other. The problem with this solution is that it would result in a subtest of only ten items, a situation in which satisfactory reliability would be most difficult to obtain. The better solution would be to revise the one item per occupation that is not satisfactory in its present form.

Part VI - World of Work Vocabulary

<u>Item</u>	<u>Recommendation</u>
3	omit - too easy for all students
4	omit - too easy for all students
5	retain
6	omit - too easy for all students
7	retain - borderline for grade 4 but good for grades 5 and 6
8	borderline - satisfactory discrimination but low L%
9	retain - poor discrimination for grade 5 but satisfactory for grades 4 and 6
10	omit - too difficult for grades 4 and 5
11	omit - too difficult for grades 4 and 5
12	borderline - poor discrimination for grade 5 - difficult item for grades 4 and 5
13	retain
14	retain
15	omit - good discrimination but L% is too high
16	retain
17	retain
18	omit - satisfactory discrimination but L% too high

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<u>Item</u>	<u>Recommendation</u>
19	retain
20	omit - too easy for all students
21	retain
22	retain
23	retain
24	retain
25	retain
26	retain
27	retain
28	retain
29	omit - satisfactory discrimination but L% too high
30	retain
31	retain - high L% for grade 6 but satisfactory for grades 4 and 5
32	retain
33	retain - high L% for grade 6 but satisfactory for grades 4 and 5
34	retain
35	retain
36	retain
37	retain

Summary

Of the thirty five items in this subtest twenty four should be retained in their present form; two are borderline and could be revised or re-tested with a different sample; nine are either too difficult or

too easy and should be eliminated. A vocabulary test of twenty four items should be of adequate length to provide satisfactory reliability so the only necessary changes in this subtest would be the elimination of the poorly performing items.

Overall Summary

The project staff is generally quite pleased with the item analysis results. A substantial number of changes have been indicated in the preceding recommendations. Many of the recommended changes are minor, however, and the majority of the items in the CERT are performing quite well statistically.

It should be pointed out that all of the recommendations in this section are based solely on item analysis statistics. Before any final decisions are made other factors need to be considered as well. For example, some of the items that are "too easy for all students" probably should be included at the beginning of each subtest. This would allow students to experience a feeling of success before encountering the more difficult items.

ITEM ANALYSIS DATA

TABLE 31

PRIMARY LEVEL

PART I - SEX ROLE STEREOTYPING

ITEMS USED TO DETERMINE "STEREOTYPING" SCORE

Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
2	0	.143	.143	.05	.037	.389	.352	.14	0	.281	.281	.11	.025	.323	.298	.15
6	0	.143	.143	.07	.025	.241	.216	.11	.009	.258	.249	.11	0	.344	.344	.14
9	.267	.357	.090	.30	.262	.648	.386	.41	.083	.461	.378	.25	.051	.448	.397	.25
11	.429	.643	.214	.62	.316	.722	.406	.47	.352	.685	.333	.53	.443	.708	.265	.60
13	.267	.357	.090	.30	.152	.611	.459	.38	.120	.517	.397	.32	.049	.438	.389	.28
15	.067	.786	.719	.42	.076	.537	.461	.26	.065	.506	.441	.30	.051	.313	.262	.20
21	.133	.643	.510	.37	.203	.519	.316	.36	.148	.659	.511	.35	.051	.646	.595	.34
23	.067	.643	.576	.37	.139	.630	.491	.36	.176	.416	.240	.30	.089	.274	.185	.18
26	.333	.571	.238	.44	.177	.593	.416	.32	.056	.568	.512	.27	.013	.354	.341	.22
30	.200	.714	.514	.40	.127	.685	.558	.31	.102	.562	.460	.29	.114	.438	.324	.26
31	0	.214	.214	.12	.038	.167	.129	.07	0	.034	.034	.01	0	.042	.042	.02
34	.200	.929	.729	.58	.127	.667	.540	.40	.093	.674	.581	.34	.063	.500	.437	.25
38	.267	.857	.590	.51	.190	.704	.514	.42	.028	.326	.298	.16	.012	.219	.207	.10
40	0	.769	.769	.31	.089	.528	.439	.27	.019	.225	.206	.10	.012	.188	.176	.08
47	.800	.929	.129	.88	.747	.907	.160	.84	.472	.920	.448	.69	.346	.865	.519	.64
48	.333	.714	.381	.56	.329	.648	.319	.45	.185	.659	.474	.40	.089	.479	.390	.28

ITEMS USED TO DETERMINE "APPROPRIATE" SCORE

1	.692	.937	.245	.84	.889	1.000	.111	.97	.930	.992	.062	.97	.931	1.000	.069	.98
4	.692	1.000	.308	.88	.711	.929	.218	.87	.791	.968	.177	.90	.793	.979	.186	.92
7	.923	1.000	.077	.95	.733	.949	.216	.87	.767	.984	.217	.90	.737	.993	.256	.92
12	.538	.937	.399	.77	.512	.960	.448	.83	.860	.984	.124	.94	.793	.993	.200	.94
16	.231	.812	.581	.58	.395	.919	.524	.72	.767	.992	.225	.90	.702	.993	.291	.91
18	.769	1.000	.231	.93	.698	.990	.292	.90	.988	1.000	.012	.99	.966	1.000	.034	.99
20	.385	.937	.552	.74	.674	.939	.265	.86	.884	.992	.108	.94	.847	.993	.146	.95
22	.308	.812	.504	.56	.455	.691	.236	.61	.304	.800	.496	.60	.441	.843	.402	.69

Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
27	.846	1.000	.154	.88	.795	.990	.195	.93	.895	1.000	.105	.96	.914	.993	.079	.98
29	.538	1.000	.462	.77	.477	.848	.371	.74	.640	.976	.336	.83	.500	.879	.379	.74
32	.308	.750	.442	.51	.273	.798	.525	.56	.259	.952	.693	.65	.466	.886	.420	.72
35	.231	.812	.581	.56	.395	.899	.504	.67	.412	.936	.524	.73	.586	.943	.357	.81
39	.583	.875	.292	.79	.500	1.000	.500	.85	.895	1.000	.105	.95	.825	.993	.168	.95
42	.538	.937	.399	.79	.545	.899	.354	.78	.674	.992	.318	.87	.804	.993	.189	.95
43	.615	.937	.322	.84	.773	1.000	.227	.92	.957	1.000	.043	.98	.912	1.000	.088	.98
46	.615	.812	.197	.67	.651	.980	.329	.88	.941	1.000	.059	.97	.947	.986	.039	.97

ITEMS USED TO DETERMINE "INAPPROPRIATE" SCORE

3	.048	.385	.337	.19	.047	.250	.203	.17	.019	.085	.066	.05	0	.200	.200	.07
5	.048	.231	.183	.12	.016	.121	.105	.07	.007	.051	.044	.03	0	.077	.077	.03
8	.333	.462	.129	.35	.016	.505	.489	.36	.097	.632	.535	.33	.097	.663	.566	.30
10	.333	.769	.436	.53	.079	.747	.668	.54	.084	.564	.480	.29	.127	.634	.507	.31
14	0	.308	.308	.09	.016	.130	.114	.08	.019	.078	.059	.04	0	.088	.088	.03
17	.143	.615	.472	.33	.159	.457	.298	.33	.052	.462	.410	.23	.135	.441	.306	.25
19	0	.769	.769	.26	.032	.272	.240	.17	0	.233	.233	.10	0	.088	.088	.03
24	.095	.692	.597	.35	.016	.304	.288	.18	0	.248	.248	.11	.012	.156	.144	.06
25	0	.462	.462	.23	.016	.250	.234	.14	.019	.214	.195	.10	.024	.143	.119	.07
28	.250	.231	.021	.26	.032	.489	.457	.32	.110	.436	.326	.25	.078	.286	.208	.15
33	0	.538	.538	.23	0	.098	.098	.05	.033	.060	.027	.04	.012	.055	.043	.03
36	0	.538	.538	.16	.016	.141	.125	.08	0	.043	.043	.02	.037	.065	.028	.05
37	.048	.308	.260	.16	.016	.272	.256	.16	.006	.128	.122	.06	0	.076	.076	.03
41	.048	.462	.414	.16	.016	.239	.223	.13	.006	.078	.072	.04	0	.165	.165	.06
44	0	.154	.154	.05	0	.087	.087	.05	0	.086	.086	.04	0	.044	.044	.02
45	.048	.538	.490	.21	0	.239	.239	.12	.006	.103	.097	.05	.006	.143	.137	.05

ITEM ANALYSIS DATA

TABLE 32

PRIMARY LEVEL

PART IV - OCCUPATIONAL CATEGORIES

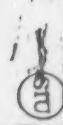
Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
2A-1	.059	.133		.09	.327	.259		.26	.146	.141		.15	.219	.118		.18
2	.235	.200		.21	.096	.074		.10	.171	.087		.11	.078	0		.05
3*	.471	.600	.129	.53	.327	.494	.167	.43	.524	.707	.183	.63	.563	.796	.233	.68
4	.118	0		.05	.115	.062		.10	.110	.043		.06	.016	.043		.03
5	.118	.067		.12	.135	.111		.11	.049	.022		.06	.125	.043		.06
2B-1	.765	.733		.71	.551	.728		.68	.819	.769		.82	.828	.581		.73
2*	0	.067	.067	.10	.102	.210	.108	.15	.084	.209	.125	.13	.109	.398	.289	.24
3	.059	.067		.07	.102	.012		.05	.024	0		.01	0	0		0
4	.118	.133		.10	.082	.037		.06	.060	.011		.03	.031	.022		.02
5	.059	0		.02	.163	.012		.05	.012	.011		.01	.031	0		.01
3A-1	.059	.067		.05	.078	.012		.03	.060	.011		.04	.031	0		.01
2*	.353	.267	-.086	.37	.294	.691	.397	.52	.434	.839	.405	.62	.453	.903	.450	.72
3	.118	.067		.09	.098	.012		.05	.060	.011		.04	.109	0		.03
4	.353	.600		.44	.490	.284		.38	.446	.140		.30	.391	.097		.24
5	.118	0		.05	.039	0		.02	0	0		0	.016	0		0
3B-1	.059	0		.07	.019	.025		.02	.024	0		.01	.016	0		0
2*	.706	1.000	.294	.79	.346	.889	.543	.66	.639	.978	.339	.84	.667	.979	.312	.89
3	0	0		0	.038	.012		.02	.012	0		.01	.016	0		.01
4	0	0		.02	.077	.025		.08	.060	0		.03	.095	.011		.03
5	.235	0		.12	.519	.049		.21	.265	.022		.11	.206	.011		.07
4A-1	.059	.067		.09	.118	.173		.15	.241	.151		.19	.297	.181		.21
2	0	0		0	.059	0		.02	0	.032		.01	0	0		0
3	.353	.200		.35	.510	.370		.46	.494	.151		.35	.344	.085		.21
4	.059	.133		.07	.176	.074		.11	.096	.022		.04	.078	.032		.05
5*	.529	.600	.071	.49	.137	.383	.246	.26	.169	.645	.476	.40	.281	.702	.421	.52

Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
4B-1	.059	0		.02	.059	0		.02	.012	0		0	.063	0		.02
2	0	0		0	.059	0		.02	.012	.011		.03	0	0		0
3*	.588	.867	.279	.77	.392	.823	.431	.66	.651	.892	.241	.79	.563	.840	.277	.70
4	.059	0		.02	.059	0		.02	.012	0		0	.016	0		0
5	.294	.133		.19	.431	.177		.28	.313	.097		.18	.359	.160		.28
5A-1*	.412	.533	.121	.37	.173	.506	.333	.38	.244	.602	.358	.42	.350	.527	.177	.44
2	.176	.133		.23	.327	.272		.30	.427	.226		.33	.333	.280		.30
3	.176	.133		.14	.154	.037		.07	.037	0		.01	.033	0		.02
4	.118	0		.12	.192	.123		.18	.220	.097		.15	.117	.086		.11
5	.118	.200		.14	.154	.062		.08	.073	.075		.09	.167	.108		.13
5B-1*	.353	.867	.514	.56	.365	.790	.425	.60	.627	.935	.308	.80	.633	.904	.271	.81
2	.059	.067		.07	.115	.037		.09	.096	.011		.05	.117	.043		.07
3	.059	.067		.09	.231	.049		.10	.036	0		.02	.067	0		.02
4	.176	0		.07	.115	.012		.06	.036	.011		.02	.100	.032		.04
5	.353	0		.21	.173	.111		.14	.205	.043		.11	.083	.021		.05
6A-1	.176	.067		.12	.260	.074		.17	.202	.032		.10	.194	0		.09
2	.059	.133		.14	.160	.111		.16	.274	.118		.18	.242	.074		.15
3*	.118	.667	.549	.33	.200	.691	.491	.48	.310	.763	.453	.56	.371	.819	.448	.63
4	.059	0		.07	.140	.086		.09	.107	.043		.08	.129	.043		.07
5	.588	.133		.35	.240	.037		.10	.107	.043		.07	.065	.064		.07
6B-1	0	0		0	.080	.012		.03	0	0		0	.081	.011		.03
2	0	0		0	.040	0		.02	0	0		0	.048	0		.01
3	.176	0		.09	.260	0		.08	.095	0		.04	.048	.043		.05
4	.118	0		.05	.080	.012		.04	.012	.011		.01	.032	0		.02
5*	.706	1.000	.294	.86	.540	.975	.435	.84	.893	.989	.096	.95	.790	.947	.157	.89
7A-1	.529	.267		.44	.196	.062		.14	.217	.054		.11	.150	0		.07
2	0	0		0	.216	.111		.18	.157	.032		.09	.267	.021		.10
3	.176	.067		.14	.118	.025		.07	.096	.032		.06	.083	0		.03
4	.176	.067		.09	.176	.136		.14	.181	.086		.14	.150	.064		.11
65 5*	.118	.600	.482	.33	.294	.667	.373	.47	.349	.796	.447	.61	.350	.915	.565	.68

Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
7B-1	.118	.133		.14	.140	.037		.08	.096	.022		.05	.129	.022		.05
2	.529	.267		.37	.160	.086		.12	.108	0		.05	.242	.022		.09
3	.118	0		.09	.220	.037		.12	.169	.032		.07	.097	.055		.07
4	.118	.067		.07	.240	.099		.17	.108	.032		.06	.097	.022		.07
5*	.118	.533	.415	.33	.240	.741	.501	.51	.518	.914	.396	.76	.435	.879	.444	.72
8A-1	.118	0		.05	.154	0		.07	.060	.011		.03	.082	.011		.04
2	.353	.133		.23	.327	.136		.23	.214	.075		.12	.230	0		.11
3*	.118	.733	.615	.47	.231	.753	.522	.49	.357	.828	.471	.61	.311	.840	.529	.62
4	.118	0		.05	.058	.025		.06	.095	.022		.07	.082	.011		.03
5	.294	.133		.21	.231	.086		.15	.274	.065		.17	.295	.138		.20
8B-1	.118	.133		.09	.216	.317		.10	.073	.011		.04	.083	.011		.03
2	.059	0		.02	.039	0		.01	.012	.011		.01	.017	0		.01
3	.353	0		.14	.196	0		.06	.110	.011		.05	.100	.011		.04
4	.059	.067		.07	.098	0		.04	.037	0		.01	.033	0		.01
5*	.412	.800	.388	.67	.451	.962	.511	.79	.768	.968	.200	.89	.767	.979	.211	.90
9A-1	.353	.267		.28	.320	.125		.20	.212	.011		.10	.259	.032		.10
2	.059	0		.02	.040	.075		.05	.050	0		.03	.034	0		.02
3	.412	.200		.30	.340	.088		.18	.088	.011		.06	.103	.032		.07
4	.059	0		.16	.180	.088		.12	.238	0		.10	.224	.021		.08
5*	.118	.533	.415	.23	.120	.625	.505	.45	.413	.978	.565	.71	.379	.915	.536	.73
9B-1	0	.067		.02	.080	.137		.13	.100	.076		.09	.083	.086		.08
2	.188	0		.10	.240	.050		.13	.063	.033		.05	.167	.043		.09
3	.250	.067		.17	.220	.212		.20	.275	.141		.21	.217	.151		.19
4	.188	0		.07	.100	.050		.08	.125	.022		.07	.050	0		.04
5*	.375	.867	.492	.64	.360	.550	.190	.46	.438	.728	.290	.58	.483	.720	.237	.60
10A-1	.188	0		.10	.200	.123		.14	.091	.011		.05	.210	0		.08
2	.250	0		.10	.100	.025		.05	.065	0		.03	.081	.011		.04
3	.125	.133		.17	.280	.272		.26	.364	.304		.34	.323	.479		.43
4	0	.067		.02	.100	.025		.06	.065	.022		.05	.016	.021		.04
5*	.438	.800	.362	.62	.320	.556	.236	.49	.416	.663	.247	.54	.371	.489	.118	.41



Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
10B-1	.235	.133			.235	.049			.200	.054			.033	.033		
2	.118	.200			.078	.037			.063	.043			.100	.087		
3	.235	.200			.078	.086			.050	.065			.033	.054		
4*	.118	0	-.118		.059	.086	.027		.088	.402	.314		.100	.250	.150	
5	.294	.467			.549	.741			.600	.435			.733	.576		
11A-1	.118	.067			.122	.074			.074	.065			.150	0		
2	0	0			.061	0			.074	.011			0	.032		
3	.059	0			.102	.062			.086	.011			.100	.021		
4	.235	0			.102	.012			.037	0			.067	0		
5*	.588	.933	.345		.612	.852	.240		.728	.913	.185		.683	.947	.264	
11B-1	.353	.467			.188	.210			.305	.172			.339	.170		
2*	.059	.133	.074		.021	.272	.251		.061	.473	.412		.097	.468	.371	
3	.294	.200			.375	.160			.195	.075			.258	.053		
4	.176	0			.125	.025			.085	.022			.081	.021		
5	.118	.200			.292	.333			.354	.258			.226	.287		



ITEM ANALYSIS DATA

TABLE 33

PRIMARY LEVEL

PART V - OCCUPATIONAL RESPONSIBILITIES

Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
3A-1	.133	0		.05	.125	.057		.09	.107	.011		.05	.113	.011		.05
2*	.733	.929	.196	.86	.571	.843	.272	.76	.733	.955	.222	.87	.710	.955	.245	.83
3	.133	.071		.10	.304	.100		.16	.160	.034		.09	.177	.034		.12
3B-1	.467	.071		.31	.439	.143		.29	.211	.011		.09	.246	0		.09
2	.333	.214		.29	.193	.114		.15	.197	.022		.09	.082	.034		.05
3*	.200	.714	.514	.40	.368	.743	.375	.56	.592	.966	.374	.82	.672	.966	.294	.85
4A-1*	.533	.786	.253	.64	.509	.899	.390	.69	.684	.966	.282	.87	.726	.989	.263	.91
2	.067	0		.05	.140	.014		.06	.079	0		.03	.113	0		.03
3	.400	.214		.31	.351	.087		.24	.237	.034		.10	.161	.011		.06
4B-1	.333	.071		.26	.175	.014		.08	.118	0		.04	.113	0		.04
2*	.267	.786	.519	.50	.509	.929	.420	.74	.763	1.000	.237	.91	.661	.978	.317	.89
3	.400	.143		.24	.316	.057		.17	.118	0		.05	.226	.022		.08
5A-1	.467	.071		.29	.382	.243		.29	.474	.303		.37	.403	.239		.35
2*	.333	.929	.596	.62	.382	.757	.375	.60	.408	.685	.277	.57	.500	.739	.239	.59
3	.200	0		.10	.236	0		.11	.118	.011		.06	.097	.023		.06
5B-1*	.267	.643	.376	.45	.547	.729	.182	.62	.553	.910	.357	.78	.639	.921	.282	.81
2	.467	.143		.24	.245	.043		.12	.171	0		.05	.131	0		.04
3	.267	.214		.31	.208	.229		.26	.276	.090		.17	.230	.079		.15
6A-1	.067	.071		.10	.228	.014		.08	.053	0		.02	.113	0		.03
2	.533	.071		.24	.333	.071		.21	.224	.034		.12	.226	0		.07
3*	.400	.857	.457	.67	.439	.914	.475	.71	.724	.966	.242	.86	.661	1.000	.339	.89
6B-1	.133	.071		.10	.211	.029		.11	.118	0		.04	.066	0		.02
2*	.467	.786	.319	.69	.474	.814	.340	.65	.697	.864	.167	.81	.426	.899	.473	.75
3	.400	.143		.21	.316	.157		.24	.184	.136		.15	.508	.101		.23

Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
7A-1*	.200	.214	.014	.24	.333	.643	.310	.52	.293	.727	.434	.54	.306	.874	.568	.60
2	.533	.357		.40	.315	.100		.20	.213	.091		.15	.306	.046		.14
3	.267	.429		.36	.352	.257		.28	.493	.182		.31	.387	.080		.26
7B-1	.333	.071		.24	.315	.171		.21	.224	.169		.22	.339	.034		.19
2	.467	.286		.38	.315	.157		.26	.342	.258		.29	.274	.101		.19
3*	.200	.643	.463	.38	.370	.671	.301	.53	.434	.573	.139	.49	.387	.865	.478	.63
8A-1	.267	.214		.24	.304	.243		.29	.224	.124		.16	.323	.169		.26
2	.267	.071		.12	.339	0		.15	.092	.022		.06	.081	0		.04
3*	.467	.714	.247	.64	.357	.757	.200	.56	.684	.854	.170	.78	.597	.831	.234	.70
8B-1	.200	.071		.19	.214	.029		.12	.171	.011		.06	.177	0		.06
2*	.467	.786	.319	.57	.393	.843	.450	.61	.539	.966	.427	.79	.452	.978	.526	.78
3	.333	.143		.24	.393	.129		.27	.289	.023		.15	.371	.022		.16
9A-1*	.071	.357	.286	.24	.200	.514	.314	.35	.224	.670	.446	.46	.210	.727	.517	.47
2	.643	.357		.39	.327	.171		.26	.329	.080		.16	.194	.054		.11
3	.286	.286		.37	.473	.314		.39	.447	.250		.37	.597	.227		.42
9B-1	.267	.071		.24	.193	.043		.09	.066	0		.02	.097	0		.03
2*	.267	.643	.376	.43	.316	.671	.355	.49	.447	.888	.441	.71	.500	.920	.420	.78
3	.467	.286		.33	.491	.286		.43	.487	.112		.27	.403	.080		.20
10A-1	.400	.357		.33	.246	.257		.26	.355	.034		.20	.306	.011		.11
2	.333	.143		.26	.263	.043		.16	.171	0		.07	.129	0		.04
3*	.267	.500	.233	.40	.491	.700	.209	.57	.474	.966	.492	.74	.565	.989	.424	.85
10B-1	.267	0		.17	.321	.086		.20	.224	.034		.12	.242	.034		.12
2	.200	.214		.26	.304	.086		.17	.263	.022		.13	.194	.067		.12
3*	.533	.786	.253	.57	.375	.829	.454	.63	.513	.944	.431	.75	.565	.899	.334	.76
11A-1*	.333	.643	.310	.45	.304	.614	.310	.41	.292	.876	.584	.55	.290	.921	.631	.69
2	.333	.214		.26	.232	.186		.21	.292	.011		.15	.226	.022		.11
3	.333	.143		.29	.464	.200		.38	.417	.112		.30	.484	.056		.20

Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
11B-1	.400	.357		.36	.439	.343		.35	.227	.045		.13	.242	.011		.10
2	.267	.214		.24	.351	.114		.23	.267	.067		.18	.129	.034		.09
3*	.333	.429	.096	.40	.211	.543	.332	.42	.507	.888	.381	.69	.629	.955	.326	.80
12A-1	.133	.143		.21	.281	.186		.21	.230	.067		.18	.339	.056		.19
2	.333	.214		.26	.404	.143		.26	.541	.101		.32	.371	.079		.23
3*	.533	.643	.110	.52	.316	.671	.355	.53	.230	.831	.601	.49	.290	.865	.575	.58
12B-1	.400	.071		.17	.298	.100		.20	.360	.101		.20	.290	.011		.10
2*	.200	.357	.157	.29	.246	.686	.440	.47	.307	.798	.491	.52	.355	.944	.589	.68
3	.400	.571		.55	.456	.214		.34	.333	.101		.28	.355	.045		.22

ITEM ANALYSIS DATA

TABLE 34

PRIMARY LEVEL

PART VI - WORLD OF WORK VOCABULARY

Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
3-A	.462	.231		.37	.316	.192		.25	.224	.062		.14	.274	.010		.09
B*	.077	.308	.231	.21	.165	.269	.104	.22	.294	.680	.386	.51	.242	.748	.506	.55
C	.077	.231		.12	.139	.173		.17	.129	.041		.06	.210	.0		.08
D	.385	.231		.30	.380	.365		.36	.353	.216		.29	.274	.243		.27
4-A	.077	.077		.07	.088	.077		.09	.071	.021		.05	.062	.019		.05
B	.308	.385		.33	.400	.250		.33	.412	.093		.23	.446	.097		.24
C	.462	.308		.35	.262	.135		.25	.188	.103		.16	.246	.029		.12
D*	.154	.231	.077	.26	.250	.538	.288	.33	.329	.784	.455	.56	.246	.854	.608	.59
5-A	.385	.154		.21	.367	.077		.22	.165	.0		.07	.200	.019		.07
B	.154	.154		.12	.266	.269		.22	.224	.134		.19	.231	.097		.13
C	.0	.0		.05	.063	.058		.09	.153	.082		.11	.185	.029		.12
D*	.462	.692	.230	.63	.304	.596	.292	.46	.459	.784	.325	.63	.385	.854	.469	.67
6-A	.500	.308		.36	.329	.077		.21	.165	.0		.07	.154	.0		.04
B	.250	.154		.24	.203	.077		.14	.059	.010		.03	.108	.0		.03
C	.083	.231		.14	.203	.058		.13	.106	.0		.04	.046	.0		.02
D*	.167	.308	.141	.26	.266	.788	.522	.52	.671	.999	.328	.86	.692	1.000	.308	.91
7-A	.385	.231		.26	.228	.192		.22	.301	.062		.15	.188	.039		.11
B*	.231	.462	.231	.35	.367	.558	.191	.43	.337	.773	.436	.58	.344	.835	.491	.61
C	.077	.077		.14	.152	.038		.11	.072	.041		.06	.188	.039		.08
D	.308	.231		.26	.253	.212		.23	.289	.124		.21	.281	.087		.20
8-A	.615	.615		.49	.275	.471		.39	.459	.361		.47	.492	.301		.39
B	.0	.0		.02	.225	.098		.15	.141	.0		.05	.138	.010		.06
C	.308	.077		.30	.188	.0		.13	.094	.010		.04	.062	.029		.04
D*	.077	.308	.231	.19	.313	.431	.118	.33	.306	.629	.323	.44	.308	.660	.352	.51

Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
9-A	.231	.231		.21	.075	.096		.12	.224	.340		.29	.262	.304		.30
B*	.077	.462	.385	.28	.200	.442	.242	.30	.282	.371	.089	.33	.354	.480	.126	.38
C	.231	0		.07	.225	.115		.16	.153	0		.06	.169	0		.05
D	.462	.308		.44	.500	.346		.42	.341	.289		.32	.215	.216		.28
10-A	.077	.154		.17	.316	.269		.28	.282	.155		.22	.297	.049		.15
B	.077	.154		.12	.316	.096		.22	.153	.113		.16	.188	.049		.12
C*	0	.385	.385	.17	.089	.462	.373	.22	.294	.691	.397	.47	.266	.873	.607	.63
D	.846	.308		.55	.278	.173		.28	.271	.041		.15	.259	.029		.09
11-A*	.077	.308	.231	.21	.162	.385	.223	.28	.321	.763	.442	.53	.338	.735	.397	.52
B	.308	.231		.23	.362	.269		.30	.286	.113		.20	.292	.147		.25
C	.385	.231		.37	.225	.115		.17	.107	.031		.05	.200	.059		.10
D	.231	.231		.19	.250	.231		.24	.286	.093		.22	.169	.059		.13
12-A*	.154	.538	.384	.21	.152	.627	.475	.32	.524	.773	.249	.64	.530	.932	.402	.77
B	.538	.154		.40	.316	.020		.20	.119	0		.05	.015	0		.01
C	.077	0		.09	.127	.059		.10	.036	.021		.04	.152	.019		.05
D	.231	.308		.30	.405	.294		.38	.321	.206		.27	.303	.049		.17
13-A	.154	.077		.19	.269	.255		.27	.202	.093		.18	.258	.078		.18
B*	.154	.231	.077	.19	.244	.333	.089	.25	.214	.680	.466	.43	.212	.670	.458	.46
C	.077	0		.07	.115	.039		.07	.119	.010		.06	.121	0		.04
D	.615	.692		.56	.372	.373		.41	.464	.216		.33	.409	.252		.32
14-A	.538	.385		.44	.410	.250		.35	.458	.320		.38	.400	.369		.38
B	.321	.077		.12	.128	.058		.10	.108	.052		.10	.092	.058		.06
C*	0	.077	.077	.09	.154	.404	.250	.23	.145	.402	.257	.26	.292	.320	.028	.31
D	.231	.462		.35	.308	.288		.32	.289	.227		.26	.215	.252		.25
15-A	.333	.077		.17	.221	.038		.12	.061	.021		.03	.082	0		.02
B	.083	0		.05	.143	.038		.10	.073	0		.03	.115	0		.04
C*	.500	.769	.269	.52	.195	.808	.613	.44	.512	.928	.416	.80	.557	.981	.424	.85
D	.083	.154		.26	.442	.115		.34	.354	.052		.14	.246	.019		.09
16-A	0	.308		.12	.190	.269		.19	.238	.082		.16	.169	.107		.13
B	.250	.231		.21	.304	.135		.28	.393	.113		.22	.215	.068		.15
C*	.083	.154	.071	.19	.101	.442	.341	.24	.190	.773	.583	.48	.400	.825	.425	.63
D	.667	.308		.48	.405	.154		.29	.179	.031		.13	.215	0		.10

Item	Grade K				Grade 1				Grade 2				Grade 3			
	L	U	D	A	L	U	D	A	L	U	D	A	L	U	D	A
17-A	.250	.154		.14	.403	.216		.35	.298	.134		.21	.354	.214		.28
B	.083	.154		.14	.208	.216		.21	.286	.155		.23	.215	.107		.18
C*	0	.231	.231	.12	.091	.255	.164	.16	.071	.598	.527	.33	.185	.544	.359	.36
D	.667	.462		.60	.299	.314		.29	.345	.113		.22	.246	.136		.18
18-A*	.750	.615	.135	.69	.462	.769	.307	.62	.631	.866	.235	.75	.561	.961	.400	.82
B	0	.231		.10	.231	.058		.13	.071	.010		.04	.152	.010		.05
C	.167	.077		.12	.128	.058		.09	.083	.021		.05	.121	.029		.06
D	.083	.077		.10	.179	.115		.15	.214	.103		.16	.167	0		.07
19-A	.154	.154		.12	.299	.231		.28	.333	.031		.16	.246	.029		.10
B	.385	.308		.40	.377	.077		.23	.083	0		.04	.123	.010		.04
C*	.077	.154	.077	.09	.078	.596	.518	.31	.393	.959	.566	.71	.369	.961	.592	.78
D	.385	.385		.40	.247	.096		.18	.190	.010		.09	.262	0		.07
20-A	.583	.077		.21	.221	.077		.19	.238	.021		.14	.182	.010		.07
B*	.083	.462	.379	.26	.182	.442	.260	.27	.214	.670	.456	.43	.258	.718	.460	.54
C	0	.308		.26	.234	.250		.23	.250	.072		.16	.273	.049		.13
D	.333	.154		.26	.364	.231		.31	.298	.237		.27	.288	.223		.27
21-A*	0	.385	.385	.12	.077	.596	.519	.27	.179	.844	.665	.56	.200	.951	.751	.64
B	.583	.385		.50	.538	.115		.35	.357	.031		.15	.308	.010		.11
C	.333	.154		.29	.218	.192		.23	.250	.083		.16	.369	.039		.17
D	.083	.077		.10	.167	.096		.15	.214	.042		.13	.123	0		.08
22-A*	.083	.231	.148	.14	.143	.635	.492	.31	.274	.753	.479	.54	.272	.777	.505	.61
B	.083	.077		.12	.273	.115		.22	.262	.093		.16	.258	.049		.11
C	.250	.077		.24	.234	.154		.19	.226	.072		.14	.227	.087		.14
D	.583	.615		.50	.351	.096		.28	.238	.082		.17	.242	.087		.13
23-A	.083	0		.10	.215	0		.13	.083	0		.03	.047	0		.02
B	.333	0		.19	.127	.019		.08	.048	.021		.03	.125	.010		.04
C*	.333	.923	.590	.50	.203	.808	.605	.44	.619	.969	.350	.83	.547	.981	.434	.86
D	.250	.077		.21	.456	.173		.35	.250	.010		.11	.281	.010		.08

ITEM ANALYSIS DATA

INTERMEDIATE LEVEL

TABLE 35

PART I - SEX ROLE STEREOTYPING

ITEMS USED TO DETERMINE "STEREOTYPING SCORE"

<u>Item</u>	<u>Grade 4</u>				<u>Grade 5</u>				<u>Grade 6</u>			
	<u>L</u>	<u>U</u>	<u>D</u>	<u>A</u>	<u>L</u>	<u>U</u>	<u>D</u>	<u>A</u>	<u>L</u>	<u>U</u>	<u>D</u>	<u>A</u>
7B	.013	.548	.535	.07	.020	.439	.419	.15	0	.520	.520	.18
8C	0	.500	.500	.15	.010	.439	.429	.15	.016	.637	.621	.23
9C	.027	.381	.354	.17	.010	.463	.453	.16	.016	.412	.396	.17
10B	.493	.905	.412	.63	.446	.866	.420	.70	.472	.951	.479	.73
11A	.173	.476	.303	.24	.040	.305	.265	.14	.073	.294	.221	.15
11C	.027	.310	.283	.13	.050	.244	.194	.10	.016	.294	.278	.12
13C	.120	.667	.547	.36	.069	.793	.724	.37	.033	.755	.722	.33
14B	.067	.238	.171	.15	.050	.183	.133	.09	.008	.147	.139	.06
15B	.120	.524	.404	.30	.109	.659	.550	.36	.106	.765	.659	.41
16C	.093	.595	.502	.29	.020	.695	.675	.30	.065	.588	.523	.28
17A	.013	.095	.082	.04	0	.098	.098	.04	0	.088	.088	.03
18A	.093	.595	.502	.33	.089	.671	.582	.37	.065	.725	.660	.35
19B	.027	.190	.163	.09	.010	.341	.331	.15	.016	.441	.425	.16
20A	.027	.238	.211	.09	0	.354	.354	.11	.008	.422	.414	.14
22B	.527	.857	.330	.67	.406	.890	.484	.70	.301	.902	.601	.63
22C	.110	.381	.271	.24	.020	.720	.750	.32	.065	.676	.611	.36

ITEMS USED TO DETERMINE "APPROPRIATE" SCORE

7A	.833	.988	.155	.93	.778	.977	.199	.90	.784	.959	.175	.90
8A	.738	.965	.227	.91	.792	.988	.196	.93	.830	.994	.164	.94
9A	.786	.977	.191	.92	.833	.971	.138	.92	.830	.994	.164	.94
10C	.810	1.000	.190	.94	.917	.994	.077	.97	.932	.994	.062	.97
12A	.500	.953	.453	.79	.500	.965	.465	.81	.466	.947	.481	.78
12C	.833	1.000	.167	.94	.931	1.000	.069	.97	.852	.994	.142	.94
13B	.810	.988	.178	.94	.861	.994	.133	.96	.852	.977	.125	.94
14A	.286	.814	.528	.62	.236	.778	.542	.57	.159	.731	.572	.50
15C	.833	1.000	.167	.96	.889	1.000	.111	.97	.943	1.000	.057	.98
16B	.619	.953	.334	.84	.529	.889	.360	.77	.455	.924	.469	.73
17B	.405	.859	.454	.68	.431	.947	.516	.78	.375	.953	.578	.76
18B	.667	1.000	.333	.89	.694	.994	.300	.89	.648	.994	.346	.88
19C	.810	1.000	.190	.94	.806	.994	.188	.95	.932	.988	.056	.96
20A	.927	.988	.061	.91	.847	1.000	.153	.89	.875	1.000	.125	.86
21A	.878	1.000	.122	.96	.931	1.000	.069	.98	.966	1.000	.034	.99
22A	.976	1.000	.024	.99	.931	1.000	.069	.98	.995	1.000	.005	.98

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ITEMS USED TO DETERMINE "INAPPROPRIATE" SCORE

<u>Item</u>	<u>Grade 4</u>				<u>Grade 5</u>				<u>Grade 6</u>			
	L	U	D	A	L	U	D	A	L	U	D	A
7C	0	.093	.093	.02	0	.104	.104	.02	.011	.092	.081	.03
8B	0	.093	.093	.02	.017	.075	.058	.03	0	.031	.031	.01
9B	.083	.465	.382	.18	.054	.507	.453	.15	.043	.338	.295	.10
10A	.099	.512	.413	.21	.083	.582	.499	.19	.075	.554	.479	.17
11B	0	.163	.163	.04	.004	.075	.071	.02	.007	.077	.070	.02
12B	.091	.256	.165	.13	.071	.179	.108	.09	.036	.200	.164	.07
13A	.008	.186	.178	.05	.017	.104	.087	.04	.025	.215	.190	.06
14C	0	.233	.233	.06	.008	.149	.141	.04	.004	.123	.119	.03
15A	.017	.186	.169	.06	0	.075	.075	.02	0	.108	.108	.02
16A	.074	.419	.345	.16	.083	.194	.111	.11	.097	.446	.349	.16
17C	.008	.047	.049	.02	.004	.194	.190	.03	0	.062	.062	.01
18C	.008	.186	.178	.05	.008	.119	.111	.03	.014	.077	.063	.03
19A	.008	.209	.201	.06	.012	.179	.167	.05	.011	.046	.035	.02
20B	.050	.047	.003	.05	.008	.060	.052	.02	.014	.046	.032	.02
21B	0	.070	.070	.02	0	.075	.075	.02	0	.123	.123	.02
21C	0	.209	.209	.05	.004	.090	.086	.02	0	.062	.062	.01

ITEM ANALYSIS DATA

TABLE 36

INTERMEDIATE LEVEL

PART IV - OCCUPATIONAL CATEGORIES

Item	Grade 4				Grade 5				Grade 6			
	L	U	D	A	L	U	D	A	L	U	D	A
3-A	.118	.133		.12	.247	.141		.16	.158	.097		.14
B	.098	.017		.04	0	0		0	.030	0		.01
C*	.706	.833	.127	.78	.654	.859	.205	.78	.762	.882	.120	.80
D	.078	.017		.03	.037	0		.03	.030	0		.01
E	0	0		.01	.062	0		.03	.020	.021		.03
4-A	.725	.550		.65	.793	.380		.64	.686	.354		.50
B*	.255	.433	.178	.30	.122	.609	.487	.31	.255	.618	.593	.46
C	.020	.017		.01	.024	0		.01	.029	0		.01
D	0	0		.01	.049	.011		.03	.010	.021		.01
E	0	0		.01	.012	0		.01	.020	.007		.01
5-A	.096	.017		.04	.060	0		.03	.139	0		.04
B	.173	.051		.10	.179	0		.07	.119	.014		.05
C*	.558	.932	.374	.74	.464	.989	.525	.76	.564	.931	.367	.78
D	.115	0		.04	.167	0		.08	.109	.035		.07
E	.058	0		.05	.131	.011		.06	.069	.021		.05
6-A	.212	.100		.14	.096	.043		.06	.149	.028		.08
B	.058	.017		.03	.048	0		.01	.050	.021		.03
C	.346	.133		.24	.446	.098		.27	.386	.104		.21
D	.058	0		.02	.060	.033		.04	.059	.007		.04
E*	.327	.750	.423	.55	.349	.826	.477	.61	.356	.840	.484	.65
7-A	.020	0		.03	.036	.011		.03	.039	.077		.01
B	.137	.068		.09	.120	.022		.08	.196	.076		.12
C*	.549	.881	.332	.69	.506	.891	.385	.70	.353	.840	.487	.66
D	.118	.017		.05	.048	.022		.04	.049	.021		.03
E	.176	.034		.12	.289	.054		.15	.363	.056		.17
9-A	.180	.017		.10	.119	.011		.06	.119	.021		.06
B	.060	.083		.05	.143	.022		.06	.129	.042		.06
C	.120	.017		.07	.143	.011		.06	.079	.007		.04
D	.160	.067		.11	.143	.054		.09	.158	.014		.08
E*	.480	.817	.337	.63	.452	.902	.450	.71	.515	.917	.402	.75
10-A	.020	.034		.02	.012	0		.01	.010	.007		.01
B	.100	.034		.07	.083	.022		.06	.088	.042		.06
C	.160	.034		.08	.155	.043		.07	.157	.042		.08
D	.240	.034		.09	.143	.022		.06	.059	0		.03
E*	.480	.864	.384	.71	.607	.913	.306	.80	.686	.909	.223	.81
11-A	.235	0		.11	.169	.011		.09	.129	.021		.06
B	.157	.050		.10	.205	0		.08	.089	.007		.04
C	.157	.017		.09	.181	.098		.11	.069	.021		.04
D	.078	.033		.05	.024	.022		.03	.089	.014		.05
E*	.373	.900	.527	.64	.422	.870	.448	.69	.624	.938	.226	.81

Item	Grade 4				Grade 5				Grade 6			
	L	U	D	A	L	U	D	A	L	U	D	A
12-A	.118	.067		.12	.120	.043		.09	.160	.076		.12
B	.235	.033		.09	.108	.054		.07	.120	.042		.07
C	.255	.167		.21	.301	.065		.17	.250	.090		.13
D	.039	0		.01	.048	0		.02	.010	0		.01
E*	.353	.733	.380	.55	.422	.837	.415	.65	.460	.792	.332	.67
13-A*	.340	.542	.202	.43	.357	.641	.284	.52	.340	.674	.334	.52
B	.220	.220		.21	.381	.120		.21	.310	.132		.22
C	.040	0		.01	.012	0		.01	.010	0		.01
D	.160	.034		.10	.048	.011		.03	.080	.021		.05
E	.240	.203		.22	.202	.228		.24	.260	.174		.20
14-A*	.280	.644	.364	.45	.277	.533	.256	.38	.304	.632	.328	.48
B	.040	0		.03	.048	.022		.04	.029	.028		.03
C	.040	0		.03	.048	.011		.02	.059	.014		.03
D	.580	.339		.43	.566	.435		.53	.608	.326		.47
E	.060	.017		.04	.060	0		.02	0	0		0
15-A	.100	0		.03	0	.022		.02	.050	0		.02
B	.040	0		.02	.050	.011		.03	.030	.014		.01
C	.540	.633		.55	.537	.516		.52	.660	.556		.60
D	.020	0		.01	.100	.022		.04	.040	.042		.03
E*	.300	.367	.067	.36	.313	.429	.116	.38	.220	.389	.169	.33
16-A	.059	.017		.05	.139	.033		.07	.040	0		.02
B	.118	.067		.12	.165	.087		.13	.158	.146		.14
C	.157	.067		.09	.025	.033		.04	.089	.035		.06
D*	.157	.383	.226	.24	.076	.467	.391	.26	.149	.458	.309	.33
E	.510	.467		.49	.595	.380		.48	.564	.361		.45
17-A	.102	.017		.05	.062	.022		.03	.129	.028		.06
B	.143	0		.05	.049	0		.02	.030	0		.01
C	.061	.017		.03	.111	.022		.04	.059	.007		.03
D	.020	0		.01	.025	0		.02	.010	0		.01
E*	.673	.946	.293	.82	.753	.956	.203	.88	.772	.965	.193	.89
18-A	.115	.033		.07	.061	.043		.05	.098	.035		.06
B	.077	.050		.06	.110	0		.06	.078	.007		.03
C	.154	.017		.06	.098	.033		.05	.069	.035		.05
D	.212	.100		.14	.207	.076		.12	.225	.097		.15
E*	.442	.800	.358	.65	.524	.848	.324	.70	.529	.826	.297	.72
19-A	.115	.067		.07	.064	.065		.07	.079	.028		.06
B	.019	0		.01	.051	0		.01	.010	0		.01
C	.115	0		.05	.090	.022		.04	.069	.014		.03
D	.058	.033		.03	.051	0		.01	.010	.007		.01
E*	.692	.900	.208	.82	.744	.913	.169	.84	.832	.951	.119	.89

Item	Grade 4				Grade 5				Grade 6			
	L	U	D	A	L	U	D	A	L	U	D	A
20-A	.212	.083		.15	.262	.054		.18	.109	.076		.12
B*	.212	.600	.388	.40	.288	.750	.462	.43	.356	.701	.345	.49
C	.173	.033		.09	.175	.011		.08	.129	.035		.07
D	.038	0		.03	.050	.033		.04	.030	.021		.03
E	.365	.283		.31	.225	.152		.26	.376	.167		.28
21-A	.229	.200		.20	.165	.172		.16	.240	.104		.15
B*	.188	.291	.103	.20	.139	.391	.252	.22	.229	.507	.278	.37
C	.208	.164		.18	.316	.161		.26	.177	.125		.15
D	.208	.236		.23	.203	.138		.18	.260	.160		.22
E	.167	.109		.12	.177	.138		.12	.094	.104		.09
22-A	.192	.172		.16	.193	.163		.16	.192	.167		.18
B	.212	.069		.15	.108	.065		.12	.192	.063		.13
C*	.212	.534	.322	.35	.145	.533	.388	.36	.273	.597	.324	.42
D	.173	.121		.15	.193	.109		.13	.172	.063		.10
E	.212	.103		.17	.361	.130		.23	.172	.111		.15

ITEM ANALYSIS DATA

INTERMEDIATE LEVEL

TABLE 37

PART V - OCCUPATIONAL RESPONSIBILITIES

Item	Grade 4				Grade 5				Grade 6			
	L	U	D	A	L	U	D	A	L	U	D	A
5-A	.636	.278		.41	.471	.195		.30	.429	.065		.21
B*	.273	.722	.449	.52	.506	.743	.237	.64	.462	.914	.452	.74
C	.091	0		.04	.024	.062		.04	.110	.022		.05
6-A*	.568	.944	.376	.76	.730	.947	.217	.82	.725	.986	.261	.88
B	.068	0		.02	.056	0		.02	.055	0		.02
C	.364	.016		.18	.213	.053		.14	.220	.014		.10
7-A	.022	.037		.04	.078	.027		.05	.044	0		.01
B	.778	.333		.55	.633	.327		.48	.659	.293		.43
C*	.200	.630	.430	.39	.289	.646	.357	.46	.297	.707	.410	.55
8-A	.089	0		.04	.109	.062		.07	.132	.043		.08
B*	.644	.963	.319	.82	.728	.912	.184	.83	.780	.929	.149	.85
C	.267	.037		.12	.163	.027		.09	.088	.029		.06
9-A	.111	.038		.07	.141	.018		.06	.124	0		.04
B	.044	0		.02	.076	.018		.05	.067	0		.02
C*	.844	.962	.118	.88	.783	.964	.181	.88	.809	1.000	.191	.93
10-A	.067	.037		.06	.087	.080		.08	.078	.050		.06
B*	.200	.333	.133	.26	.174	.487	.313	.34	.200	.650	.450	.42
C	.733	.630		.65	.739	.434		.58	.722	.300		.52
11-A	0	0		0	.066	0		.02	.022	0		.01
B*	.222	.537	.315	.41	.231	.646	.415	.43	.231	.671	.440	.48
C	.778	.463		.56	.703	.354		.55	.747	.329		.51
12-A	.222	.111		.16	.198	.168		.17	.209	.029		.09
B	.289	.148		.18	.187	.097		.16	.220	.057		.14
C*	.489	.741	.525	.64	.615	.735	.120	.66	.571	.914	.343	.77
13-A*	.432	.870	.438	.66	.465	.903	.438	.71	.533	.885	.352	.76
B	.136	.056		.10	.186	.044		.09	.100	.022		.05
C	.432	.074		.21	.349	.053		.17	.367	.094		.19
14-A	.341	.283		.35	.367	.348		.38	.389	.329		.39
B	.455	.189		.29	.356	.152		.23	.356	.093		.19
C*	.205	.528	.323	.33	.278	.500	.222	.37	.256	.579	.323	.41
15-A*	.311	.852	.541	.60	.300	.920	.620	.61	.308	.870	.562	.65
B	.178	.037		.10	.233	.018		.10	.099	.007		.05
C	.511	.111		.28	.467	.062		.28	.593	.123		.29

Item	Grade 4				Grade 5				Grade 6			
	L	U	D	A	L	U	D	A	L	U	D	A
16-A	.356	.167		.25	.337	.150		.28	.311	.173		.25
B*	.467	.759	.292	.62	.393	.832	.439	.60	.500	.806	.306	.68
C	.178	.074		.12	.270	.018		.12	.189	.022		.06
17-A	.364	.113		.23	.295	.018		.14	.156	.014		.08
B*	.523	.830	.307	.66	.534	.956	.422	.77	.733	.957	.224	.88
C	.114	.057		.07	.170	.027		.07	.111	.029		.04
18-A*	.489	.815	.326	.63	.418	.858	.440	.68	.637	.971	.334	.82
B	.111	.019		.04	.077	.035		.05	.088	.014		.03
C	.400	.167		.30	.505	.106		.26	.275	.014		.15
19-A*	.689	.833	.144	.74	.551	.964	.413	.81	.703	.957	.254	.85
B	.089	.019		.04	.112	.027		.04	.055	.014		.03
C	.222	.148		.18	.337	.009		.14	.242	.029		.12
20-A	.313	.056		.12	.144	.009		.06	.099	.007		.04
B	.356	.148		.21	.467	.161		.28	.440	.093		.22
C*	.333	.796	.463	.65	.389	.830	.441	.65	.462	.900	.438	.74
21-A	.333	.130		.21	.241	.195		.22	.233	.164		.19
B*	.429	.704	.275	.58	.506	.717	.211	.60	.556	.793	.237	.67
C	.238	.167		.16	.253	.088		.16	.211	.043		.14
22-A*	.429	.667	.238	.51	.448	.732	.284	.57	.344	.750	.406	.57
B	.214	.056		.12	.195	.080		.13	.244	.079		.13
C	.357	.278		.34	.356	.188		.28	.411	.171		.30
23-A	.267	.056		.16	.146	.009		.06	.261	.014		.08
B	.400	.093		.23	.326	.009		.15	.239	.050		.11
C*	.333	.852	.519	.57	.528	.982	.454	.78	.500	.936	.436	.80
24-A	.159	.019		.06	.169	.009		.06	.136	.0		.04
B*	.568	.870	.302	.71	.607	.973	.366	.81	.670	.993	.323	.88
C	.273	.111		.23	.225	.018		.10	.193	.007		.07

ITEM ANALYSIS DATA

INTERMEDIATE LEVEL

TABLE 38

PART VI - WORLD OF WORK VOCABULARY

Item	Grade 4				Grade 5				Grade 6			
	L	U	D	A	L	U	D	A	L	U	D	A
3-A	0	0		0	.026	0		.01	.010	0		.01
B	.036	0		.01	.026	0		.01	.010	0		.01
C	.107	.068		.07	.105	.036		.06	.125	.047		.07
D*	.768	.932	.164	.86	.816	.964	.148	.90	.833	.945	.112	.89
E	.089	0		.04	.026	0		.01	.021	.008		.02
4-A*	.768	.977	.209	.85	.779	.946	.167	.87	.794	.922	.128	.88
B	.018	0		.01	.039	.027		.02	.041	0		.01
C	.036	.023		.02	.026	0		.01	.010	.008		.01
D	.018	0		.02	.013	0		.01	0	.023		.01
E	.161	0		.08	.143	.027		.09	.155	.047		.08
5-A	.130	.205		.16	.247	.152		.17	.143	.117		.16
B	.426	.045		.25	.221	.098		.14	.306	.039		.17
C*	.370	.705	.335	.52	.442	.723	.281	.63	.429	.820	.391	.62
D	.037	.023		.02	.065	.009		.03	.061	.008		.03
E	.037	.023		.02	.026	.018		.02	.061	.016		.03
6-A	.196	.068		.10	.139	0		.04	.083	.008		.03
B	.125	0		.05	.152	.027		.07	.021	.008		.02
C	.036	.023		.03	.089	.027		.05	.052	0		.03
D	.089	0		.04	.076	.009		.02	.031	.008		.01
E*	.554	.909	.355	.77	.544	.938	.394	.81	.813	.977	.164	.90
7-A	.182	.227		.23	.208	.243		.26	.214	.133		.20
B	.200	.045		.12	.299	0		.11	.163	.008		.06
C	.091	.023		.06	.117	.027		.06	.051	.016		.03
D	.182	.205		.16	.182	.054		.11	.184	.039		.10
E*	.345	.500	.155	.41	.195	.676	.481	.45	.388	.805	.417	.60
8-A	.291	.409		.37	.256	.304		.31	.286	.211		.26
B*	.164	.455	.291	.26	.256	.509	.253	.39	.224	.703	.479	.47
C	.309	.045		.21	.333	.143		.21	.214	.086		.17
D	.127	.068		.09	.077	.027		.05	.224	0		.09
E	.109	.023		.04	.077	.018		.04	.051	0		.01
9-A	.154	.070		.11	.143	.054		.08	.104	.032		.06
B*	.327	.651	.324	.48	.429	.595	.166	.54	.479	.746	.267	.63
C	.231	.140		.18	.273	.162		.19	.208	.079		.15
D	.115	.070		.09	.052	.135		.11	.125	.111		.11
E	.173	.070		.08	.104	.054		.07	.083	.032		.04
10-A	.135	.136		.13	.247	.036		.16	.158	.150		.17
B	.192	.136		.20	.299	.116		.18	.221	.079		.14
C*	.250	.450	.200	.32	.273	.446	.173	.33	.242	.598	.356	.42
D	.192	.182		.18	.104	.339		.24	.242	.173		.21
E	.231	.091		.13	.078	.063		.08	.137	0		.05

Item	Grade 4				Grade 5				Grade 6			
	L	U	D	A	L	U	D	A	L	U	D	A
11-A	.161	.071		.12	.128	.144		.13	.168	.048		.09
B	.107	.119		.10	.218	.063		.12	.179	.063		.12
C	.286	.190		.27	.269	.207		.23	.284	.246		.25
D	.321	.357		.33	.231	.171		.22	.274	.048		.18
E*	.125	.262	.137	.13	.154	.414	.260	.26	.095	.595	.500	.33
12-A*	.250	.476	.226	.36	.260	.459	.199	.34	.323	.772	.449	.50
B	.214	.167		.20	.247	.072		.17	.115	.031		.07
C	.125	.048		.07	.169	.045		.09	.104	.031		.07
D	.161	.048		.12	.195	.117		.15	.135	.031		.10
E	.250	.262		.22	.130	.306		.23	.323	.134		.24
13-A	.196	.182		.18	.233	.080		.16	.268	.047		.16
B*	.214	.477	.263	.37	.233	.768	.535	.48	.278	.813	.535	.56
C	.232	.091		.13	.274	.045		.12	.216	.023		.08
D	.214	.250		.23	.192	.098		.17	.175	.094		.14
E	.143	0		.07	.068	.009		.04	.062	.023		.04
14-A	.179	.136		.20	.184	.036		.13	.200	.039		.12
B*	.250	.568	.318	.34	.263	.679	.416	.48	.337	.859	.522	.59
C	.143	.045		.09	.184	.045		.07	.137	.016		.05
D	.232	.023		.15	.211	.027		.11	.095	.008		.06
E	.196	.227		.22	.158	.214		.19	.232	.078		.17
15-A	.182	0		.09	.187	.009		.08	.143	.032		.08
B*	.582	.976	.394	.74	.440	.910	.470	.72	.622	.937	.315	.81
C	.109	0		.07	.187	.045		.09	.071	.032		.04
D	.036	0		.01	.093	.009		.04	.051	0		.02
E	.091	.024		.05	.093	.027		.05	.112	0		.05
16-A	.036	.048		.08	.081	.027		.06	.124	.039		.08
B	.236	.119		.16	.149	.108		.15	.165	.070		.15
C	.255	.048		.18	.446	.162		.25	.196	.078		.11
D	.182	.071		.13	.162	.117		.14	.124	.102		.11
E*	.291	.714	.423	.41	.162	.586	.424	.37	.392	.711	.319	.55
17-A	.096	.070		.09	.213	.027		.10	.189	.008		.11
B	.269	.116		.21	.204	.189		.19	.168	.141		.18
C	.077	0		.02	.133	.009		.05	.084	0		.03
D	.019	.093		.08	.067	.045		.06	.074	0		.03
E*	.538	.721	.183	.55	.387	.730	.343	.58	.484	.852	.368	.63
18-A*	.608	.930	.322	.76	.579	.928	.349	.79	.577	.945	.368	.79
B	.118	.047		.07	.105	.036		.05	.103	0		.03
C	.137	0		.05	.152	.009		.06	.155	0		.06
D	.039	.023		.03	.066	.018		.04	.062	.047		.05
E	.098	0		.04	.092	.009		.04	.103	.008		.06
19-A	.268	.143		.20	.237	.116		.15	.206	.031		.13
B	.250	.095		.20	.263	.107		.21	.268	.070		.15
C	.143	.048		.07	.118	.027		.07	.103	.023		.05
D*	.161	.571	.410	.36	.237	.741	.504	.49	.340	.844	.504	.61
E	.179	.143		.13	.145	.009		.06	.082	.031		.06

Item	Grade 4				Grade 5				Grade 6			
	L	U	D	A	L	U	D	A	L	U	D	A
20-A	.125	.023		.07	.130	.027		.05	.031	0		.02
B	.054	.023		.03	.130	.009		.04	.124	0		.04
C*	.643	.953	.310	.79	.584	.938	.354	.83	.711	.969	.258	.88
D	.089	0		.04	.065	.018		.04	.093	.023		.04
E	.089	0		.04	.091	.009		.03	.041	.008		.02
21-A	.218	.091		.21	.158	.054		.11	.133	0		.06
B	.145	.091		.13	.197	.027		.10	.122	.016		.05
C	.236	.114		.17	.211	.081		.12	.184	.008		.11
D	.109	.023		.04	.066	.009		.03	.051	.008		.02
E*	.291	.682	.391	.43	.368	.829	.461	.62	.510	.969	.459	.76
22-A	.204	.114		.22	.156	.089		.16	.271	.078		.15
B	.167	0		.07	.221	.009		.08	.094	0		.03
C	.111	.205		.16	.273	.125		.19	.177	.117		.15
D	.278	.023		.12	.195	0		.07	.135	0		.06
E*	.241	.659	.418	.40	.156	.777	.621	.48	.323	.805	.482	.61
23-A*	.364	.628	.264	.41	.208	.652	.444	.45	.281	.797	.516	.56
B	.127	.047		.12	.182	.036		.10	.177	.008		.07
C	.273	.116		.20	.312	.196		.21	.260	.125		.17
D	.091	.093		.10	.221	.071		.13	.125	.008		.08
E	.145	.116		.13	.078	.045		.09	.156	.063		.09
24-A*	.164	.535	.371	.30	.160	.723	.563	.46	.260	.844	.584	.59
B	.164	.093		.14	.160	.045		.10	.198	.016		.08
C	.55	.093		.24	.267	.089		.17	.260	.063		.13
D	.145	.256		.15	.213	.107		.17	.198	.063		.14
E	.273	.023		.13	.200	.036		.09	.083	.016		.04
25-A*	.196	.500	.304	.25	.234	.577	.343	.36	.175	.819	.644	.47
B	.118	.095		.14	.182	.144		.15	.155	.071		.14
C	.176	.071		.09	.130	.081		.12	.175	.047		.10
D	.118	.119		.11	.234	.027		.13	.227	.016		.10
E	.392	.214		.36	.21	.171		.22	.268	.047		.17
26-A	.094	0		.04	.114	0		.03	.021	.008		.01
B	.434	.136		.28	.304	.135		.21	.289	.063		.15
C	.038	0		.02	.101	0		.04	.082	0		.03
D	.094	.023		.05	.114	.081		.10	.113	0		.05
E*	.340	.841	.501	.57	.367	.784	.417	.62	.495	.930	.435	.75
27-A	.182	.091		.15	.145	.027		.08	.143	.008		.05
B*	.255	.705	.450	.43	.276	.865	.589	.59	.337	.906	.569	.66
C	.218	.045		.13	.329	.045		.17	.214	.070		.13
D	.182	.068		.10	.132	.009		.17	.153	.008		.06
E	.164	.091		.16	.118	.054		.29	.153	.008		.09
28-A	.321	.136		.21	.221	.054		.13	.316	0		.13
B	.125	.068		.11	.195	.027		.09	.173	.023		.07
C*	.375	.795	.420	.55	.377	.893	.516	.69	.367	.969	.602	.74
D	.071	0		.05	.169	.027		.06	.102	.008		.05
E	.107	0		.06	.039	0		.02	.041	0		.02

Item	Grade 4				Grade 5				Grade 6			
	L	U	D	A	L	U	D	A	L	U	D	A
29-A*	.527	.955	.428	.74	.538	.946	.408	.81	.711	.969	.258	.87
B	.164	.023		.10	.192	.036		.08	.082	.016		.05
C	.109	0		.05	.090	0		.03	.062	.008		.02
D	.018	0		.01	.115	.009		.05	.010	0		.01
E	.182	.023		.08	.064	.009		.03	.134	.008		.05
30-A	.089	.227		.12	.171	.126		.15	.163	.148		.14
B	.250	.114		.18	.263	.027		.10	.276	.008		.11
C*	.375	.659	.284	.54	.276	.811	.535	.61	.388	.820	.432	.65
D	.107	0		.05	.092	0		.03	.092	.008		.04
E	.179	0		.09	.197	.036		.08	.082	.016		.05
31-A	.386	.205		.32	.295	.089		.15	.204	.031		.12
B	.088	0		.05	.154	.009		.06	.051	0		.03
C*	.298	.705	.407	.47	.372	.848	.476	.68	.571	.953	.382	.78
D	.105	.068		.08	.128	.054		.08	.112	.016		.05
E	.123	.023		.07	.051	0		.02	.061	0		.02
32-A*	.316	.727	.411	.45	.208	.874	.666	.56	.340	.883	.543	.65
B	.123	.045		.07	.221	.018		.11	.113	0		.11
C	.105	.023		.08	.156	.018		.06	.113	0		.05
D	.228	.114		.20	.208	.036		.15	.175	.047		.09
E	.228	.091		.18	.208	.054		.11	.155	.031		.08
33-A*	.269	.791	.522	.55	.316	.955	.639	.72	.516	.969	.453	.80
B	.514	.023		.09	.165	.018		.07	.147	.008		.05
C	.192	.023		.09	.228	0		.06	.074	.008		.03
D	.154	.116		.11	.139	0		.06	.116	0		.04
E	.231	.047		.12	.152	.027		.07	.147	.016		.06
34-A	.182	.045		.13	.165	.009		.07	.122	0		.06
B	.164	.023		.09	.215	.009		.08	.092	0		.04
C	.200	.045		.12	.165	.018		.07	.153	.008		.06
D	.182	.045		.12	.165	0		.07	.163	.023		.07
E*	.273	.841	.568	.53	.291	.964	.673	.70	.469	.969	.500	.76
35-A	.182	0		.07	.104	.009		.03	.125	.008		.04
B	.164	.045		.12	.182	.018		.12	.094	.008		.05
C	.145	0		.08	.130	.009		.04	.115	.008		.04
D*	.327	.932	.605	.60	.390	.955	.565	.71	.469	.977	.508	.79
E	.182	.023		.10	.195	.009		.08	.198	0		.07
36-A	.143	.136		.16	.145	.063		.13	.134	.030		.08
B	.214	.045		.13	.197	.045		.10	.186	.016		.08
C	.196	.023		.13	.250	.018		.10	.103	.016		.05
D*	.161	.682	.521	.37	.250	.821	.571	.53	.320	.866	.546	.63
E	.286	.114		.20	.158	.054		.11	.258	.063		.15
37-A	.273	.186		.24	.192	.071		.15	.103	.039		.09
B*	.109	.535	.426	.32	.179	.714	.535	.42	.196	.843	.547	.52
C	.255	.093		.16	.205	.063		.17	.247	.039		.12
D	.164	.140		.14	.179	.098		.14	.320	.024		.15
E	.200	.047		.12	.244	.054		.11	.134	.055		.11

RELIABILITY ANALYSIS

Two types of reliability estimates are discussed in this section: internal consistency (split-half) and test-retest. The internal consistency estimates were derived from the data gathered during the Joliet Pilot Study and are presented in Table 39. Data from the Breese Study was used to determine the test-retest reliabilities which may be found in Tables 40 through 42.

Internal Consistency

The Spearman-Brown Formula was used to compute the internal consistency estimates. Essentially, these estimates are the correlations between the odd items and the even items for each subtest and are thus a measure of how well a test "hangs together." As may be seen in Table 39, the results are mixed. The estimates for Part I and VI tend to be in, or near an acceptable range for a test at this stage of development. The estimates for Parts IV and V are generally too low to be considered acceptable. Since these estimates depend, at least in part, upon the length of a test, one way of raising these measures would be to simply add more items to each subtest. This, however, would be contrary to our stated goal of test brevity. Before lengthening these subtests the staff recommends that the changes discussed in the item analysis section be made and additional testing then conducted with the revised instrument.

Test-Retest

The reliability figures in Tables 40 through 42 represent the

TABLE 39

INTERNAL CONSISTENCY ESTIMATES

(SPLIT-HALF RELIABILITIES)

<u>Test Area</u>	<u>Grade Level</u>									
	<u>K-3</u>	<u>1-3</u>	<u>K</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4-6</u>	<u>4</u>	<u>5</u>	<u>6</u>
<u>Part I</u> Sex Role Stereotyping	.65	.64	.74	.63	.76	.52	.75	.54	.66	.82
<u>Part IV</u> Career Categories	.21	.21	.13	.21	.18	.24	.75	.69	.34	.23
<u>Part V</u> Occupational Responsibilities	.02	.05	-.12	.19	-.16	.13	.55	.79	.24	.00
<u>Part VI</u> World of Work Vocabulary	.40	.40	.50	.58	.23	.34	.88	.66	.54	.41

correlations between students' scores on the first test administration and their scores on the second test administration. If the CERT was a "finished product", these results would be disappointing; given its stage of development, however, the staff is encouraged by the results. Especially considering the well-known problems associated with trying to establish test-retest reliability with students in the elementary grade levels.

Since the attitudes and values of elementary age children are quite volatile, the test-retest reliabilities for Parts II and III can probably not be increased significantly without substantially increasing the length of these subtests. Actually, many of the reliabilities for these subtests are in, or near, an acceptable range for this type of test. The test-retest reliabilities for the cognitive subtests (Parts I, IV, V and VI) may show substantial improvement when the changes recommended in the item analysis section are implemented and additional testing conducted.

TABLE 40
TEST - RETEST RELIABILITIES
ALL STUDENTS

<u>Test Area</u>	<u>Grade Level</u>							
	<u>1-3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4-8</u>	<u>4</u>	<u>6</u>	<u>8</u>
<u>Part I</u>								
Sex Role Stereotyping	.34	.34	.19	.46	.59	.32	.71	.93
Accuracy	.59	.47	.38	.42	.51	.40	.91	.41
<u>Part II</u>								
Money Only	.47	.34	.45	.66	.66	.68	.22	.77
Uses for Money	.46	.49	.40	.32	.51	.58	.38	.54
Service to Others	.33	.12	.34	.47	.54	.64	.48	.01
Personal Satisfaction	.30	.23	.19	.52	.56	.57	.58	.67
<u>Part III</u>								
Agricultural/Industrial	.66	.69	.68	.54	.75	.75	.70	.92
Business/Marketing/Management	.27	.11	.35	.30	.66	.72	.30	.80
Health	.57	.47	.74	.46	.69	.53	.82	.89
Personal/Public Service	.33	.23	.39	.32	.52	.41	.56	.72
<u>Part IV</u>								
Career Categories	.32	.43	.29	.44	.50	.46	.72	.25
<u>Part V</u>								
Occupational Responsibilities	.45	.05	.48	.50	.56	.68	.59	.38
<u>Part VI</u>								
World of Work Vocabulary	.70	-.30	.74	.64	.68	.68	.82	.63

TABLE 41
 TEST - RETEST RELIABILITIES
 STUDENTS WITH INTERVENING CAREER EDUCATION

<u>Test Area</u>	<u>Grade Level</u>							
	<u>1-3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4-8</u>	<u>4</u>	<u>6</u>	<u>8</u>
<u>Part I</u>								
Sex Role Stereotyping	.53	.83	.27	.39	.64	-.08	.71	.94
Accuracy	.72	.70	.48	.55	.52	.09	.91	.42
<u>Part II</u>								
Money Only	.41	.55	.23	.59	.63	.65	.22	.77
Uses for Money	.30	.59	.23	.19	.57	.74	.38	.54
Service to Others	.46	.48	.31	.58	.57	.74	.48	.01
Personal Satisfaction	.37	.60	.27	.44	.57	.64	.58	.64
<u>Part III</u>								
Agricultural/Industrial	.58	.50	.62	.52	.78	.77	.70	.92
Business/Marketing/Management	.13	-.10	.33	.06	.67	.75	.30	.81
Health	.46	.57	.57	.37	.72	.53	.82	.89
Personal/Public Service	.32	.42	.56	.11	.55	.41	.56	.71
<u>Part IV</u>								
Career Categories	.29	.46	.41	.18	.43	.14	.72	.33
<u>Part V</u>								
Occupational Responsibilities	.37	-.36	.46	.56	.34	.36	.59	.38
<u>Part VI</u>								
World of Work Vocabulary	.67	-.23	.61	.41	.60	.52	.82	.64

TABLE 42

TEST - RETEST RELIABILITIES

STUDENTS WITHOUT INTERVENING CAREER EDUCATION

<u>Test Area</u>	<u>Grade Level</u>							
	<u>1-3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4-8</u>	<u>4</u>	<u>6</u>	<u>8</u>
<u>Part I</u>								
Sex Role Stereotyping	.07	-.14	.13	.24		.39		
Accuracy	.46	.30	.28	.15		.33		
<u>Part II</u>								
Money Only	.50	.16	.64	.64		.78		
Uses for Money	.61	.36	.56	.66		.17		
Service to Others	.17	-.19	.39	.23		.48		
Personal Satisfaction	.18	-.09	.05	.69		.50		
<u>Part III</u>								
Agricultural/Industrial	.70	.79	.68	.55		.70		
Business/Marketing/Management	.42	.36	.34	.72		.33		
Health	.62	.29	.81	.74		.57		
Personal/Public Service	.32	.06	.02	.67		.46		
<u>Part IV</u>								
Career Categories	.29	.46	.18	.51		.54		
<u>Part V</u>								
Occupational Responsibilities	.42	.52	.43	-.15		.58		
<u>Part VI</u>								
World of Work Vocabulary	.66	-.34	.75	.61		.53		

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CONTACTS WITH COMMERCIAL PUBLISHERS

In the absence of a state-sponsored publishers' conference, the project staff contacted a total of twenty four publishers regarding their possible interest in the CERT. A copy of the letter sent to each follows the list of publishers contacted. Replies were received from ten publishers, five of whom expressed a potential interest in the CERT. A copy of this report will be forwarded to these five publishers.

Publishers Contacted

Abt Publications of Abt Assoc.
55 Wheeler Street
Cambridge, MA 02138

American Guidance Service, Inc.
Publisher's Building
Circle Pines, MN 55014

Argus Communications
7440 Natchez Avenue
Niles, IL 60648

Careers, Inc.
P.O. Box 135
Largo, FL 33540

Chronicle Guidance Publications
Aurora Street
Moravia, NY 13118

Curriculum Innovations
501 Lake Forest Avenue
Highwood, IL 60040

Fearon-Pitman Publishers, Inc.
6 Davis Drive
Belmont, CA 94002

Guidance Centre, Faculty of Educ.
University of Toronto
1000 Yonge Street
Toronto, Ontario
M4W 2K8 Canada

Addison-Wesley Testing Service
2715 Sand Hill Road
Menlo Park, CA 94025

American Learning Systems
P.O. Box 2173
Columbus, GA 31902

The Bobbs-Merrill Company
4300 West 62nd Street
Indianapolis, IN 46206

Changing Times Education Service
1729 H Street, NW
Washington, DC 20006

Consulting Psychologists Press
577 College Avenue
Palo Alto, CA 94306

EdITS Educational and Industrial
Testing Service
P.O. Box 7234
San Diego, CA 92107

J.G. Ferguson Publishing Co.
111 East Wacker
Chicago, IL 60611

Houghton Mifflin Company
One Beacon Street
Boston, MA 02107

Institute for Personality and
Ability Testing
1602 Coronado Drive
Champaign, IL 61820

Jastak Associates
1526 Gilpin Avenue
Wilmington, DE 19806

Research Psychologists Press
P.O. Box 984
Port Huron, MI 48060

Science Research Associates
155 North Wacker Drive
Chicago, IL 60606

Intran Corporation
4555 West 77th Street
Minneapolis, MN 55435

McKnight Publishing Company
P.O. Box 2854
Bloomington, IL 61701

Scholastic Testing Service
480 Meyer Road
Bensenville, IL 60106

Time Share Corporation
P.O. Box 683
Hanover, NH 03755



Southern Illinois University at Edwardsville | Edwardsville, Illinois 62025

COPY OF FORM LETTER SENT TO COMMERCIAL PUBLISHERS

As a publisher of educational tests and/or materials, you are aware of the emphasis being placed on career education in the United States today. We are sending you the enclosed brochure, "Career Education Readiness Test, An Overview," to acquaint you with a recently developed career education test for which a commercial publisher is being sought.

The "Overview" was designed for use as a hand-out at teacher workshops. As such, it does not contain all of the information you would need for a thorough evaluation of the Career Education Readiness Test (CERT). It should be detailed enough, however, to give you a fairly clear picture of the structure and purpose of the CERT.

We believe that the CERT meets a very real need in elementary education. As such, it should prove to be an easily marketable instrument and a profitable addition to the line of any publisher.

The authors of the CERT will be able to handle any of the preliminary negotiations for publishing rights. Final contractual arrangements will need to be conducted under the auspices of the Illinois State Board of Education.

If you believe that your company would be interested in producing the CERT commercially, please have one of your representatives contact us at the following address:

Career Education Readiness Measurement
Box 123
Southern Illinois University
Edwardsville, Illinois 62026
(ATTN: Corine/Henrichs)

Telephone: (618) 692-3946

LIMITATIONS

Several limitations can be cited which may have affected results discussed in this final report. One such limitation is the manner in which students were selected for inclusion in the studies. The process of random sampling is an important statistical concept which was not implemented in these studies. Schools and classrooms for the Joliet study were selected by district administrators. Students in the Breese and East Saint Louis studies were volunteered by their classroom teachers as a means of fulfilling course requirements. While the students selected represented a substantial range of geographic and demographic variability, it should not be assumed that the results discussed in this report may be applied to Illinois students generally.

The administration of the CERT may have been another limitation. Specific suggestions for structuring the classroom environment and procedures for administration were outlined in the test manual. It cannot be determined, however, that these suggestions and procedures were followed explicitly.

The length of time between testings in the Breese and East Saint Louis studies may have had an undetermined effect on the results. Six weeks elapsed between testings in the Breese study, seven weeks in the East Saint Louis study.

Another difficulty was the teachers' lack of familiarity with the concept of career education. None of the teachers involved in constructing the CERT learning activities had any previous experience with career education. This may have affected the quality of the learning activities they produced.

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The length of time devoted to career education activities in the Breese and East Saint Louis studies may be a critical factor. Perhaps twenty to thirty minutes per week is not sufficient to produce significant changes in students' knowledge of, and attitudes toward the world of work.

The process involved in transforming students' original responses to the CERT into a form amenable to computer processing may have been another problem area. The equipment available for this process at S.I.U.E. is somewhat antiquated and cumbersome and may have introduced some error variance.

RECOMMENDATIONS

Interspersed throughout this report are many recommendations and suggestions offered by the project staff concerning the various forms and subtest areas of the CERT. Rather than reiterate these recommendations and suggestions, the project staff would prefer to devote this space to the offering of one overriding recommendation, one which we cannot stress strongly enough.

It is recommended by the project staff that the Division of Adult, Vocational and Technical Education expend whatever amounts of time and energy are required to secure a commercial publisher for the CERT. The limits imposed by DATVE funding and the physical equipment available at S.I.U.E. have been reached. The next steps in the continued development of the CERT require the funds, personnel and sophisticated processing equipment which commercial publishers have at their disposal.

We believe that the CERT has the potential to become an extremely valuable tool for elementary teachers who are involved, or interested, in career education. The response from both teachers and students who have been involved in the project's activities has been overwhelmingly positive. The statistical results contained in this report are encouraging. The project staff and the many others who have been associated with the project would be most disappointed if the results of their efforts are relegated to a dusty back room filing cabinet marked "inactive."